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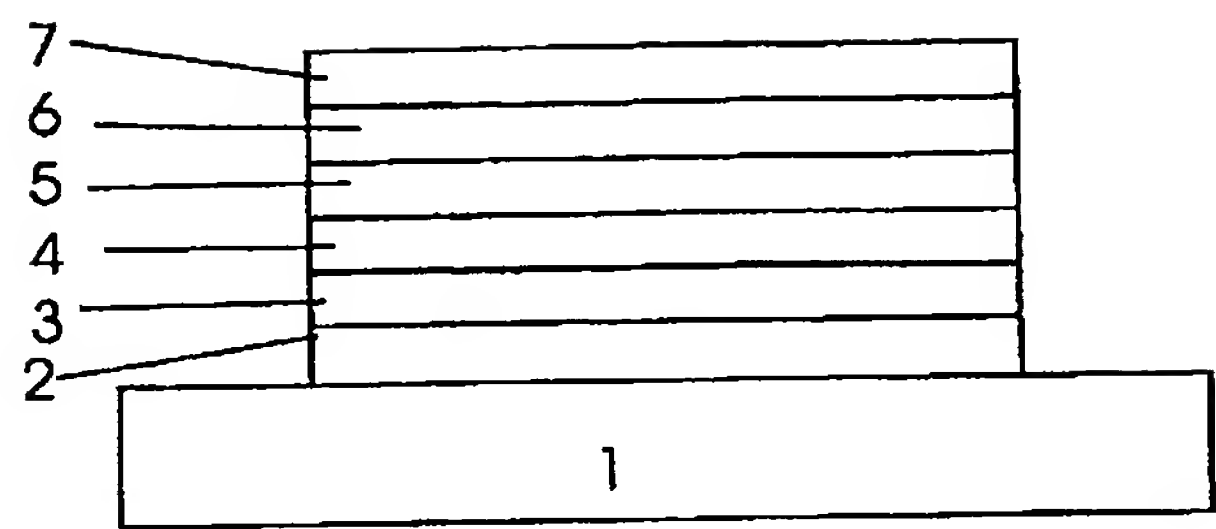
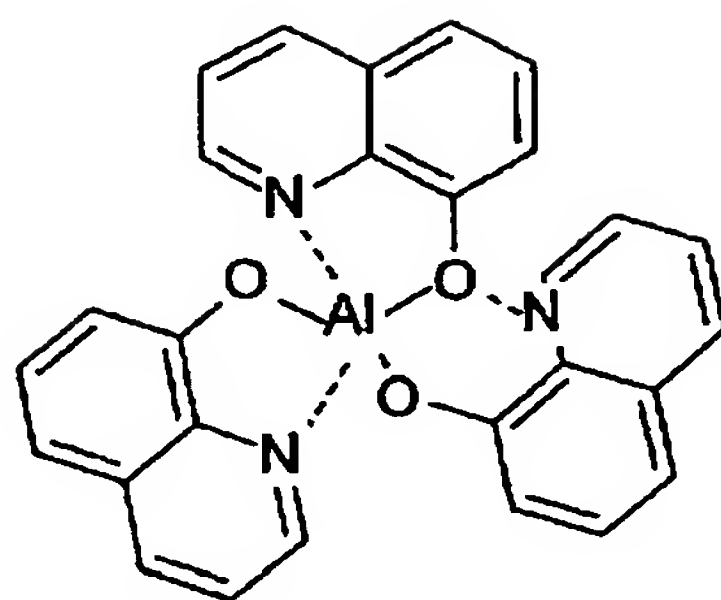
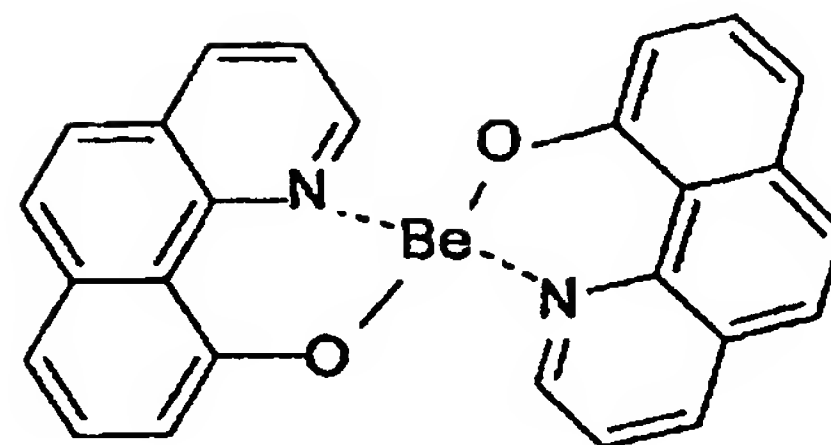


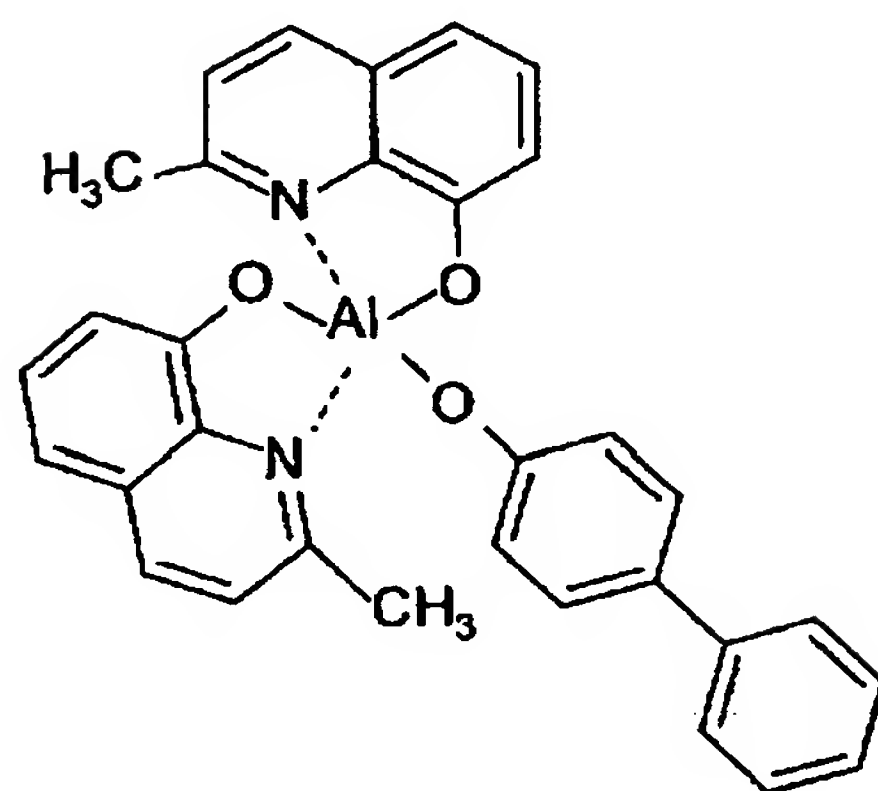
Fig. 1



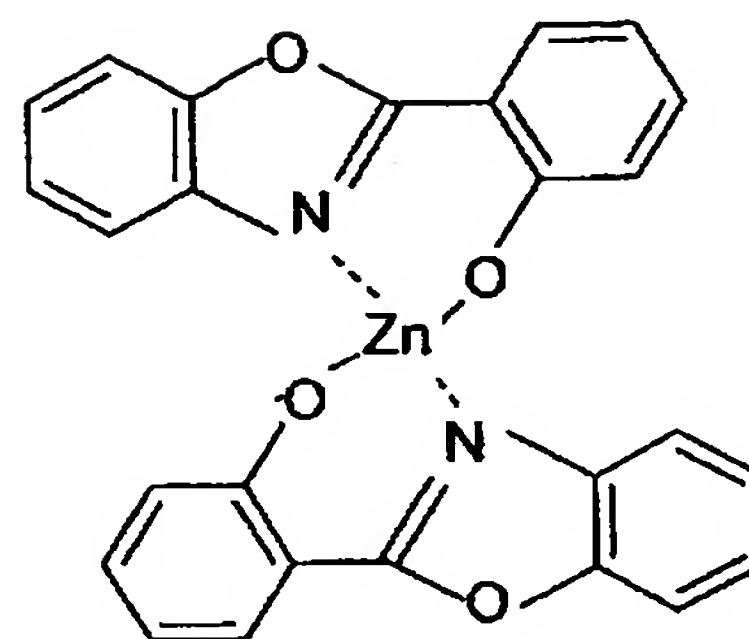
Alq



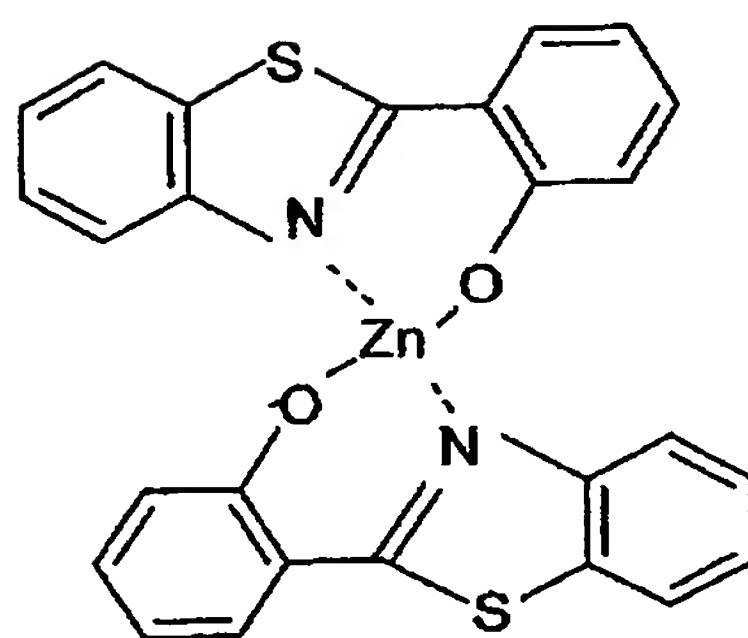
Beq



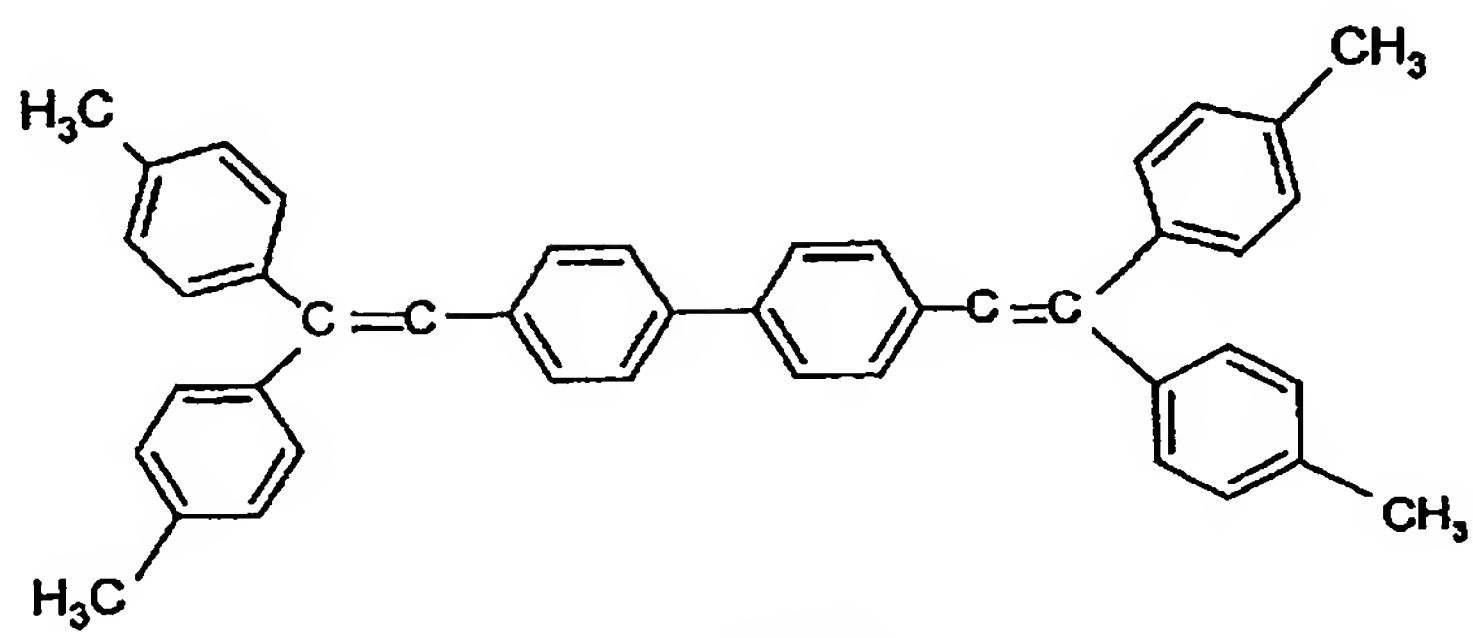
BAlq1



ZnPBO



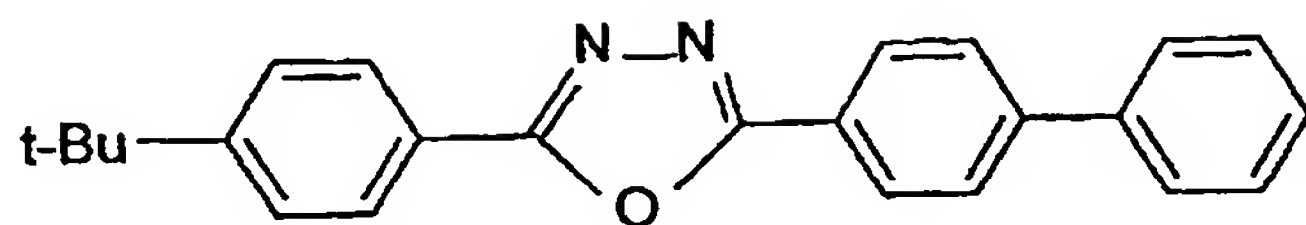
ZnPBT



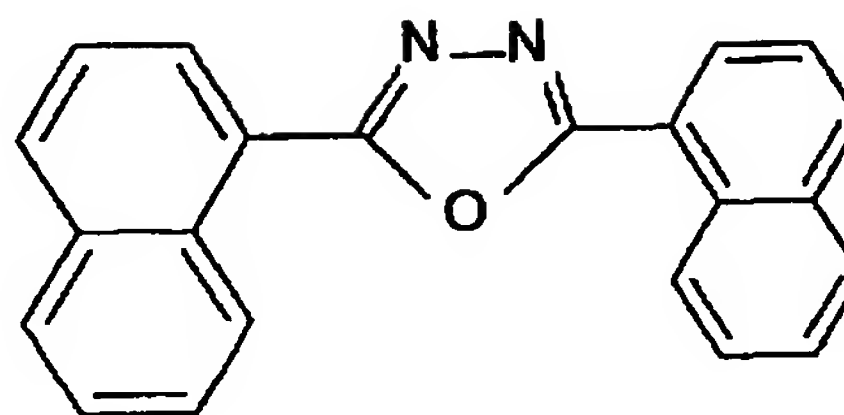
DTVb1

Fig. 2

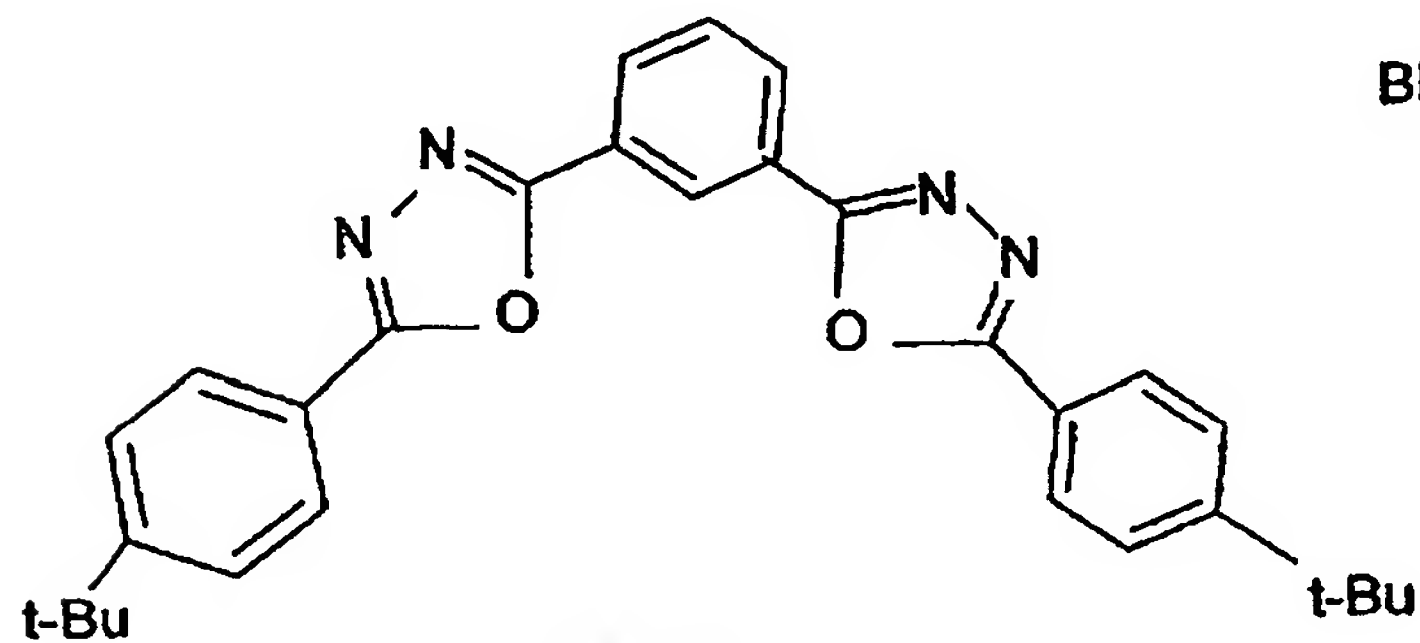
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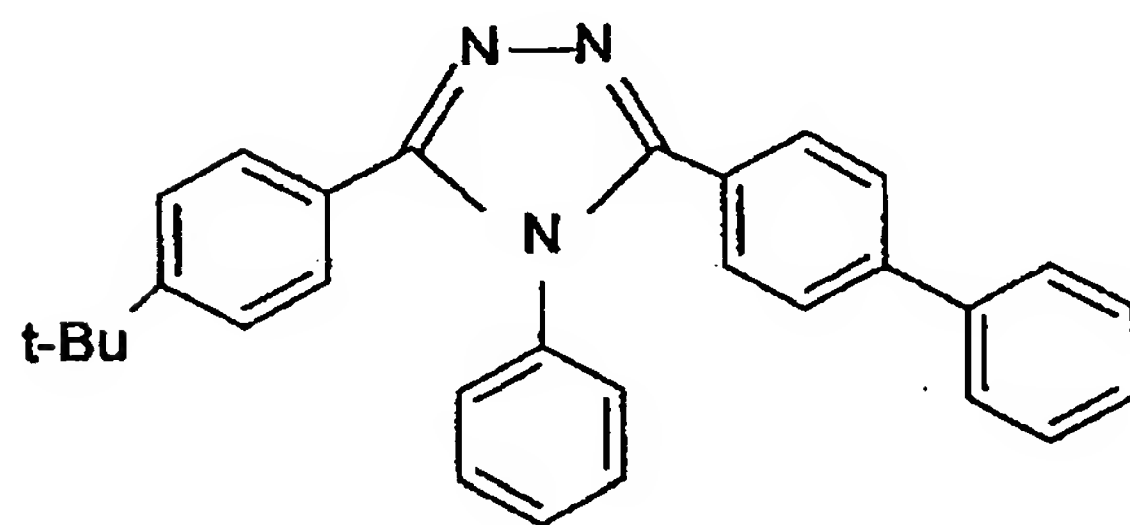
t-Bu-PBD



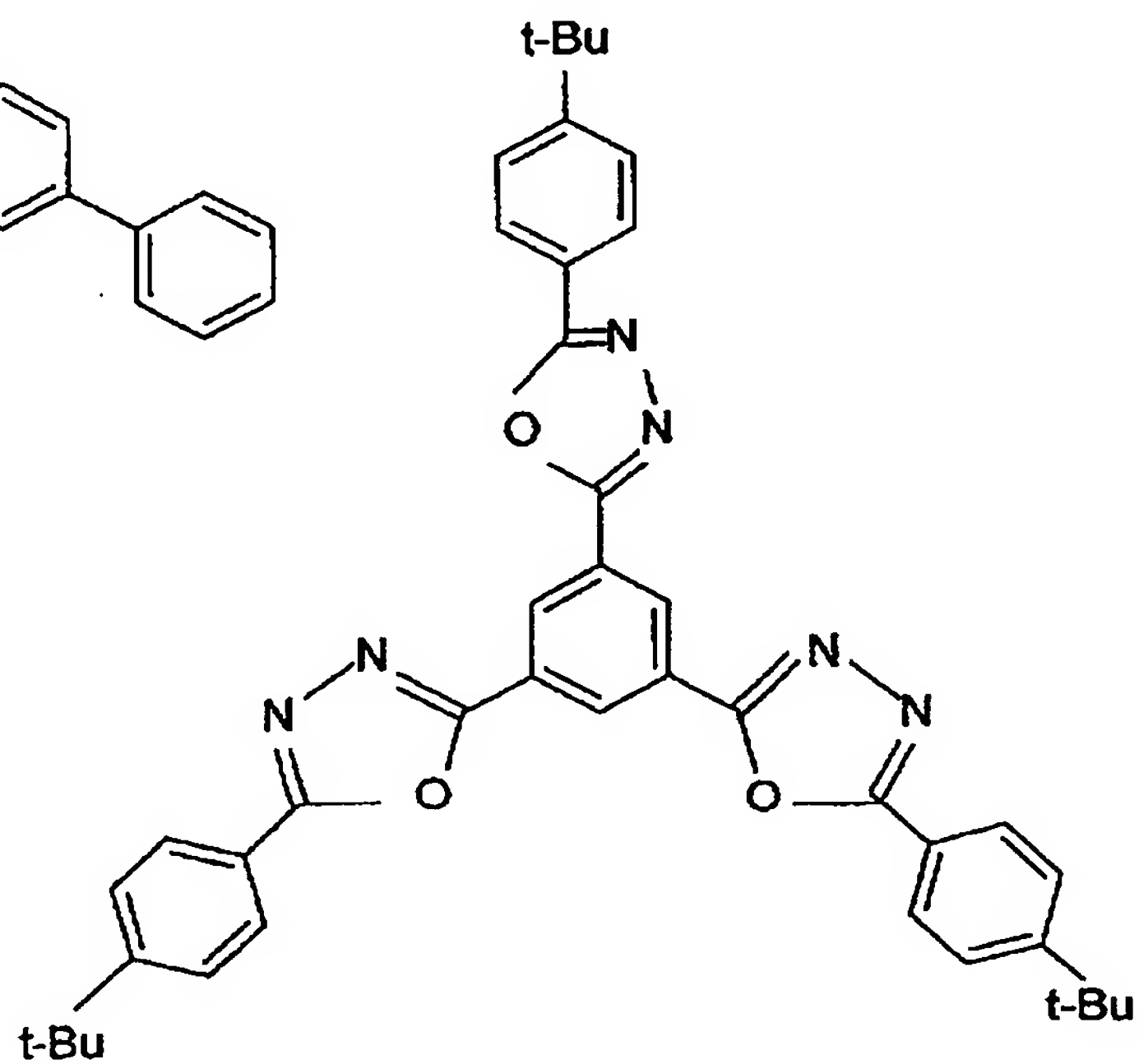
BND



OXD-7



TAZ



OXD-Star

Fig. 3

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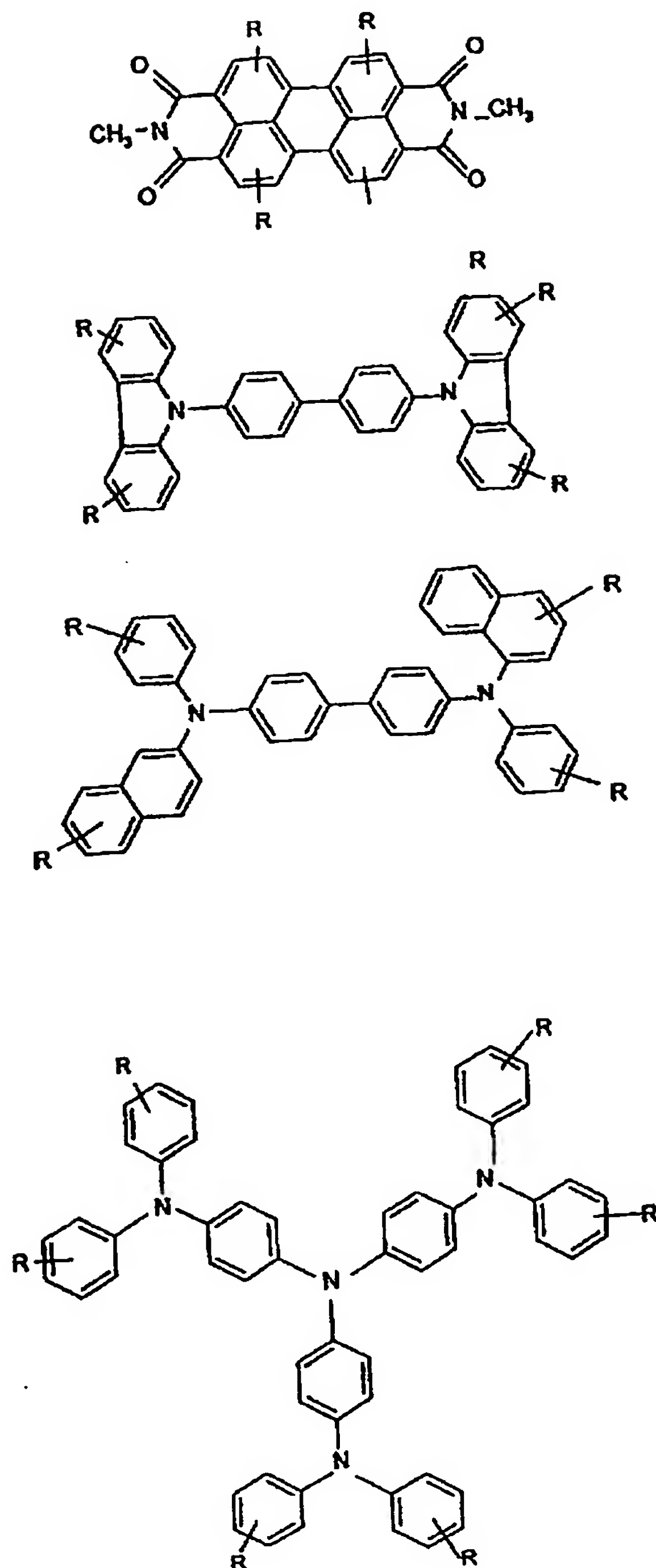


Fig. 4

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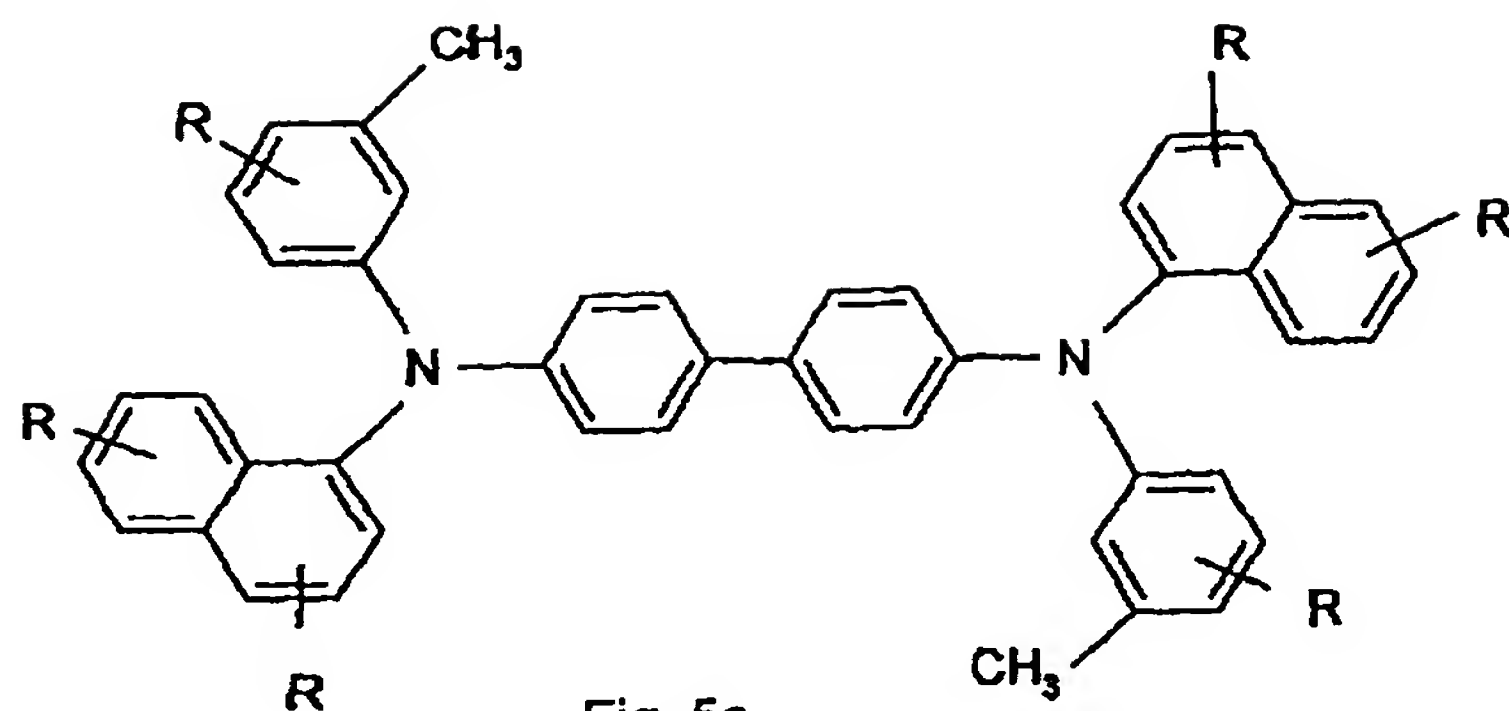


Fig. 5a

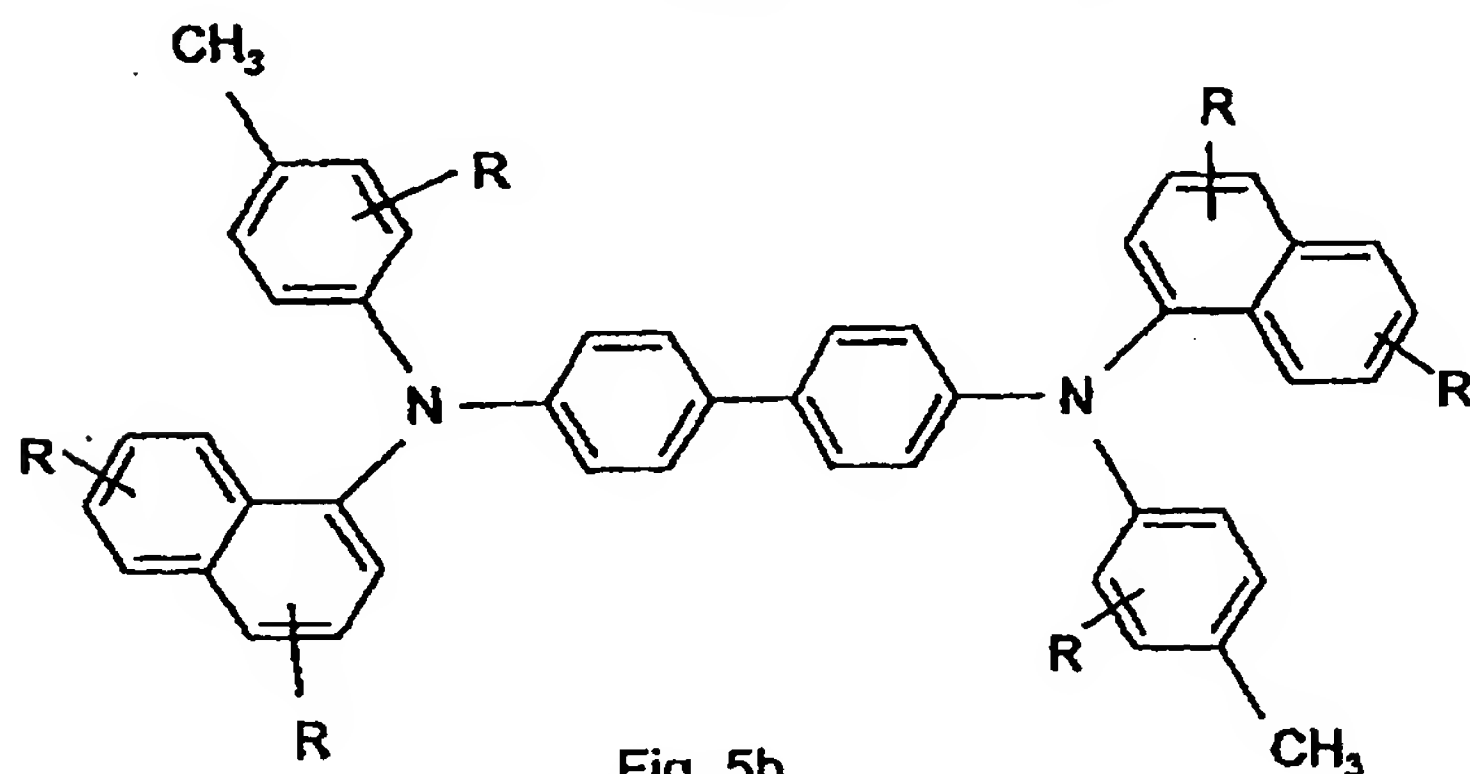


Fig. 5b

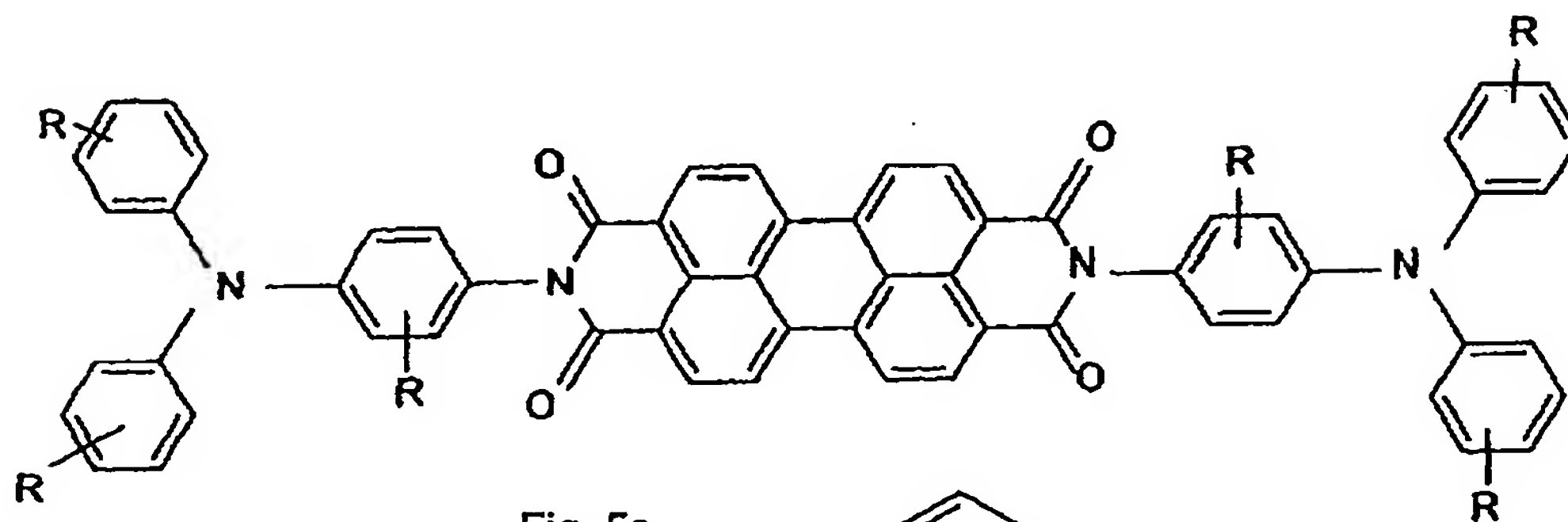


Fig. 5c

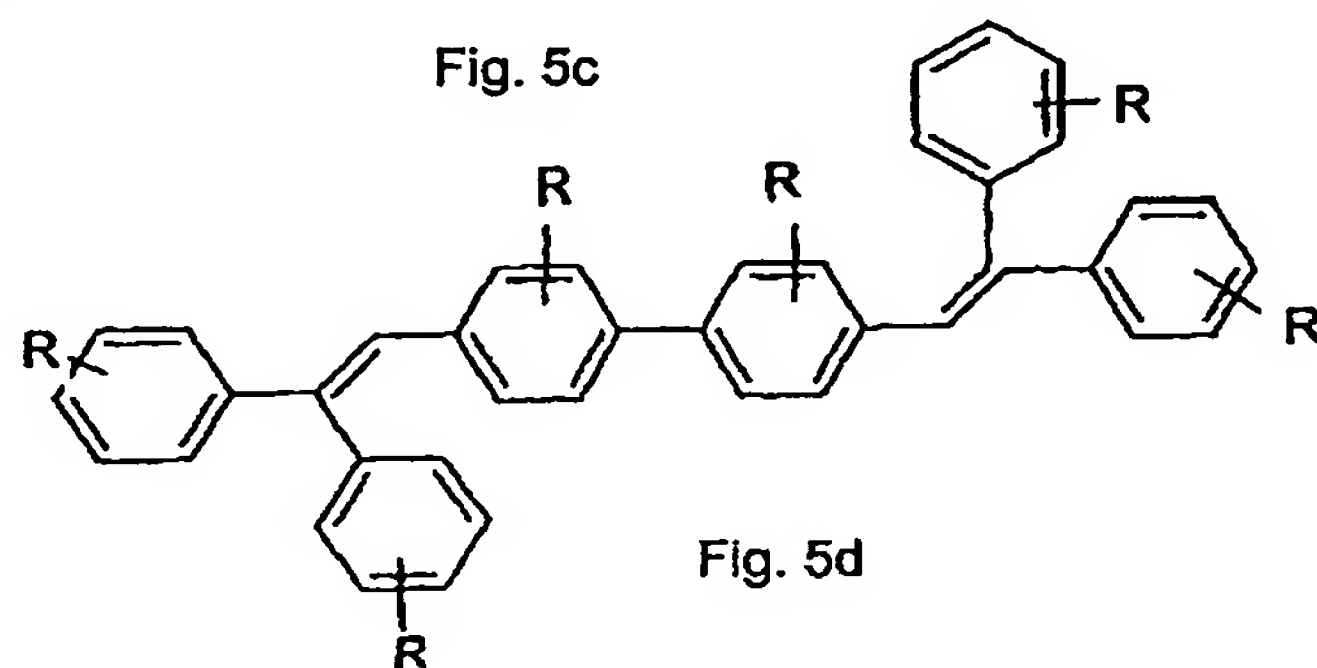
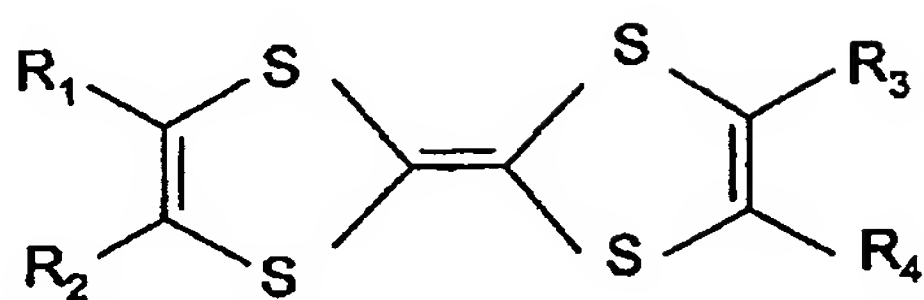
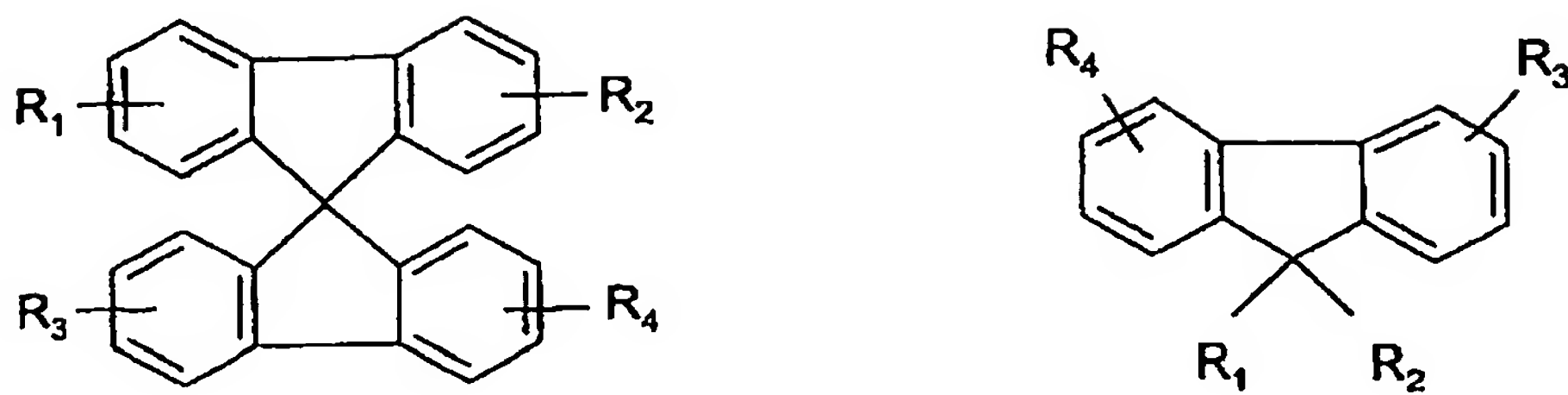


Fig. 5d

Fig. 5

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or

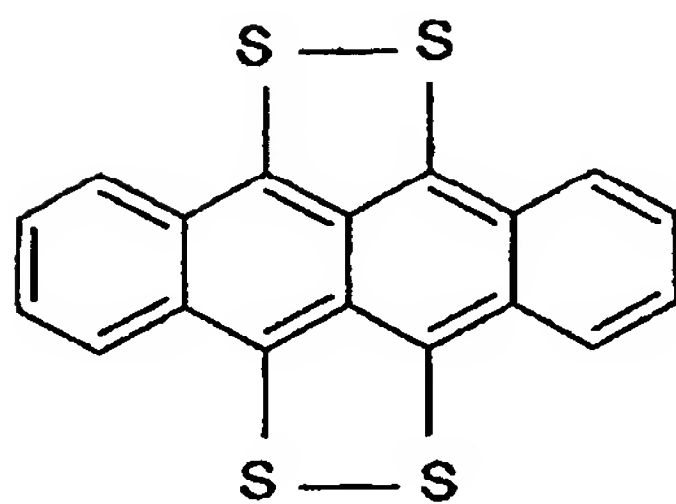
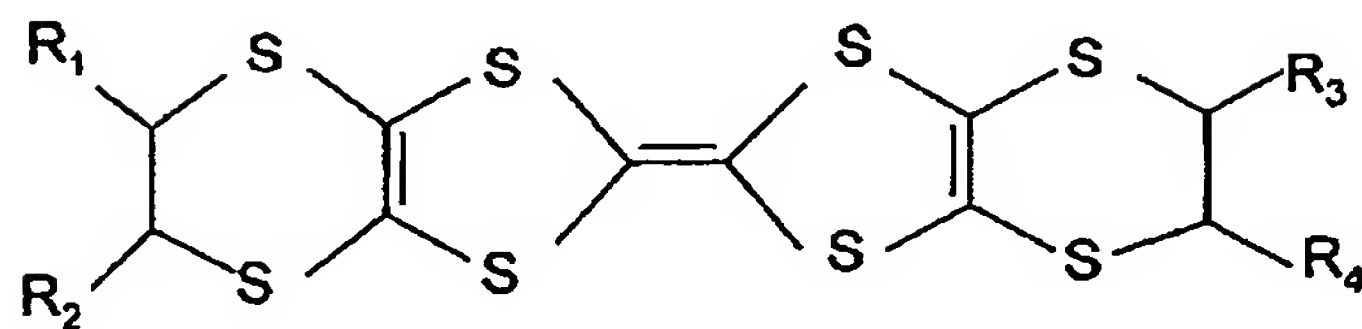


Fig. 6

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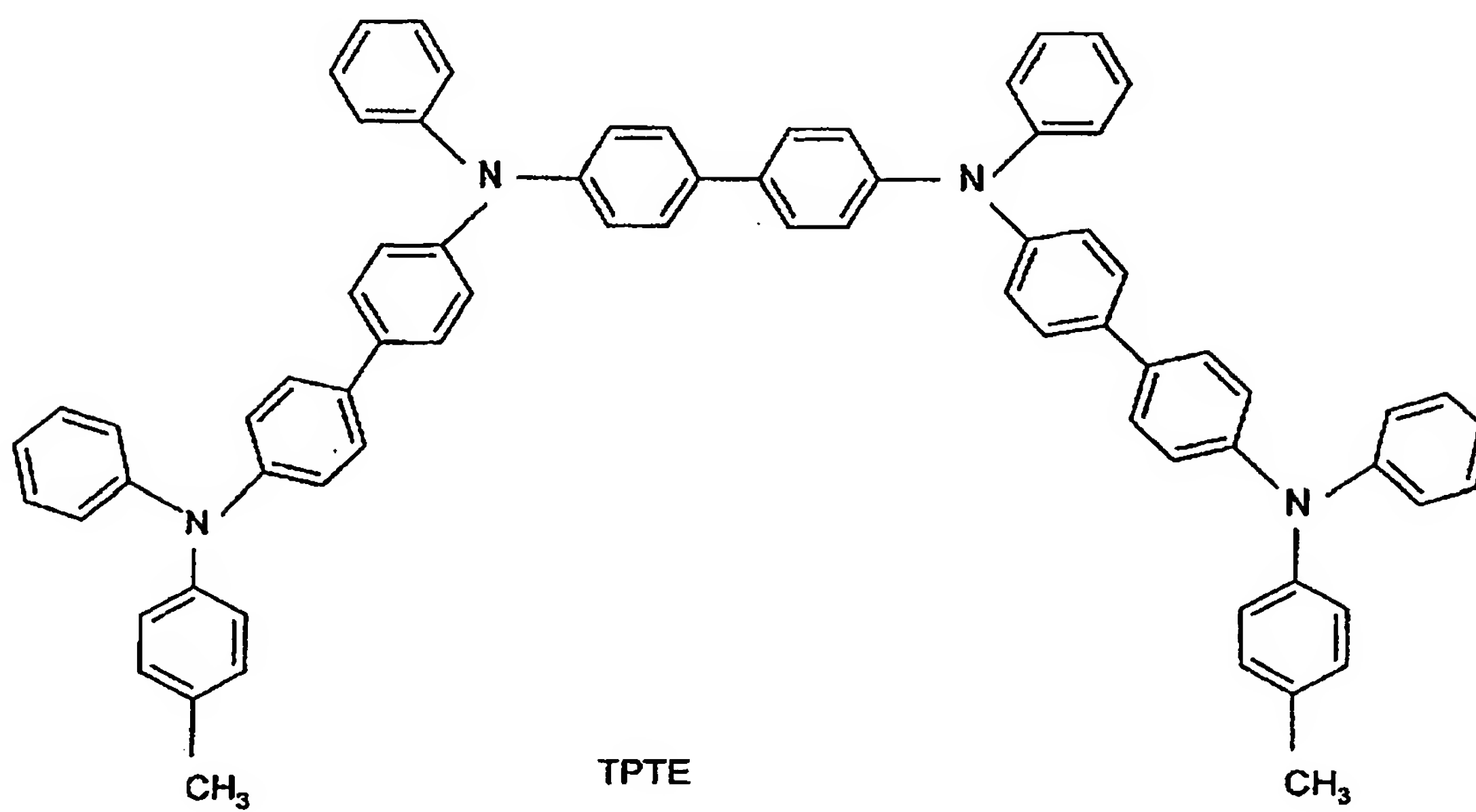
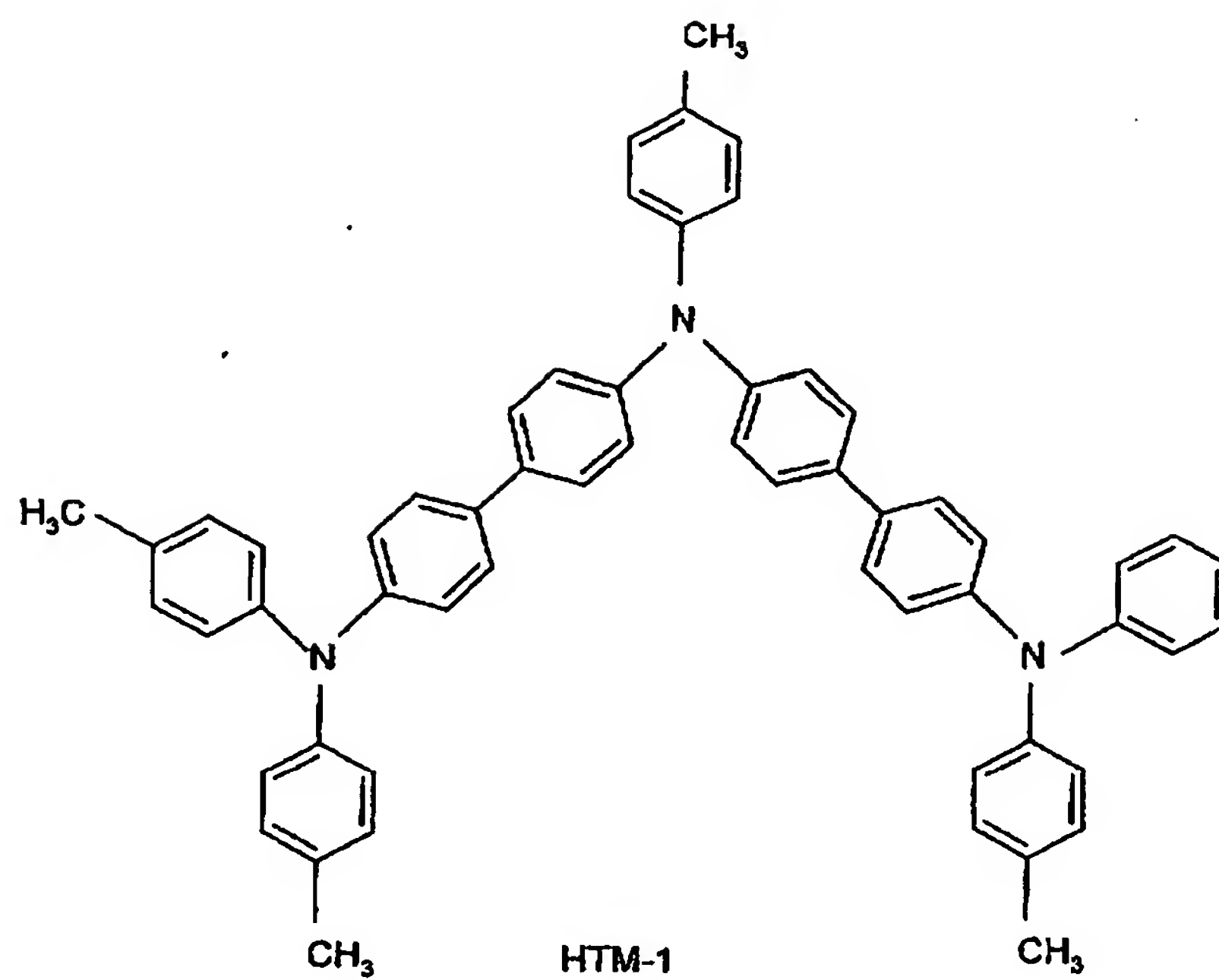
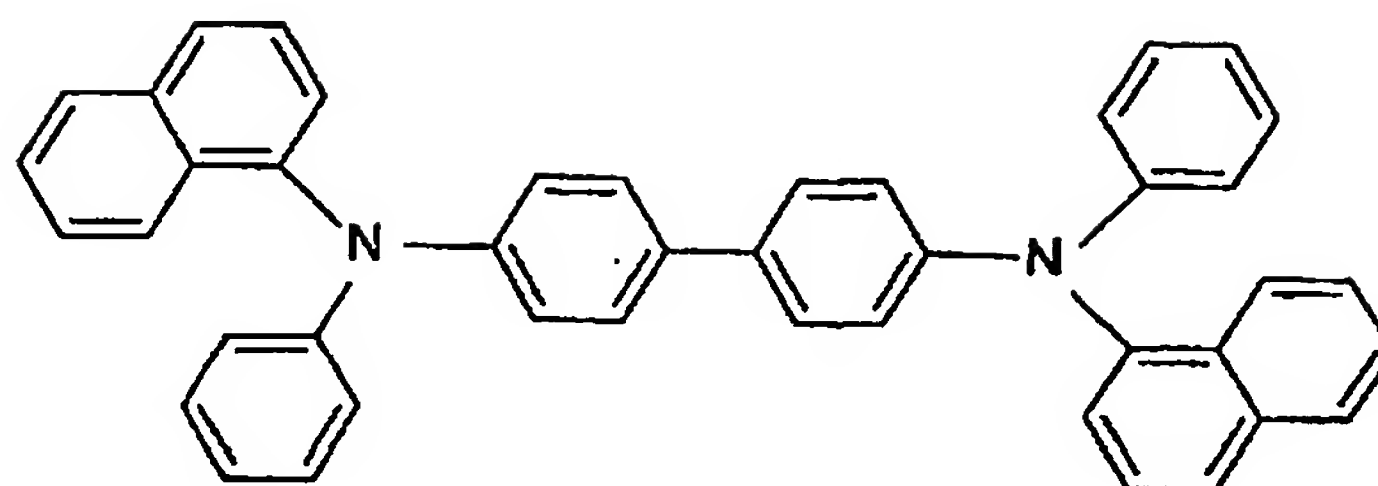
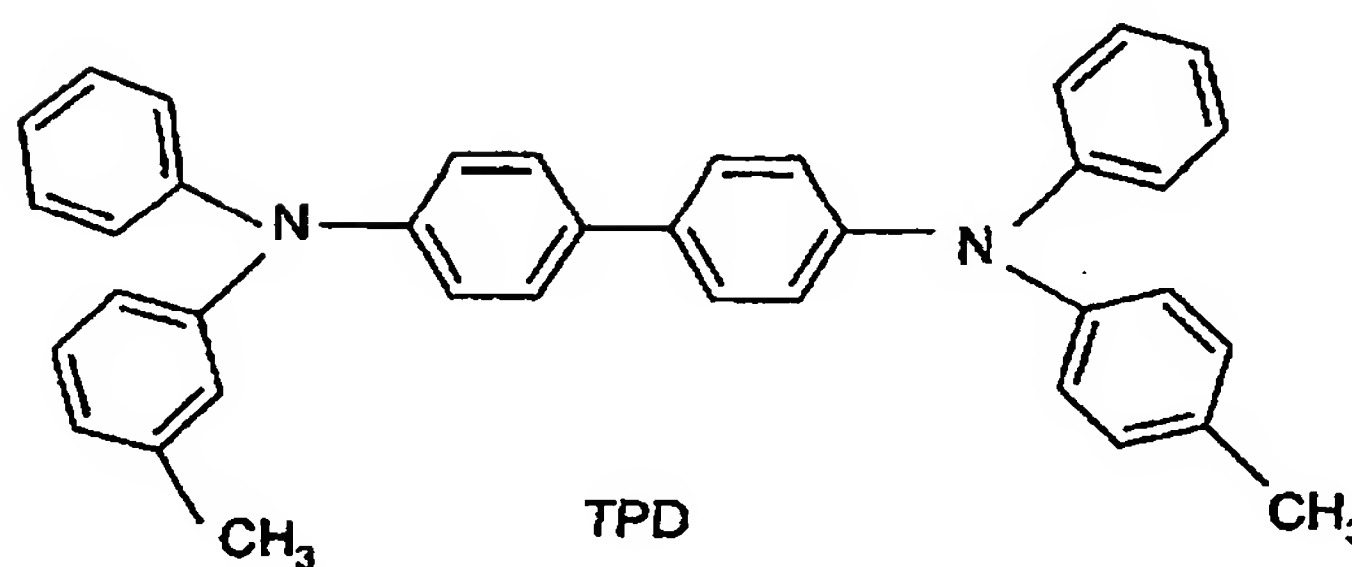
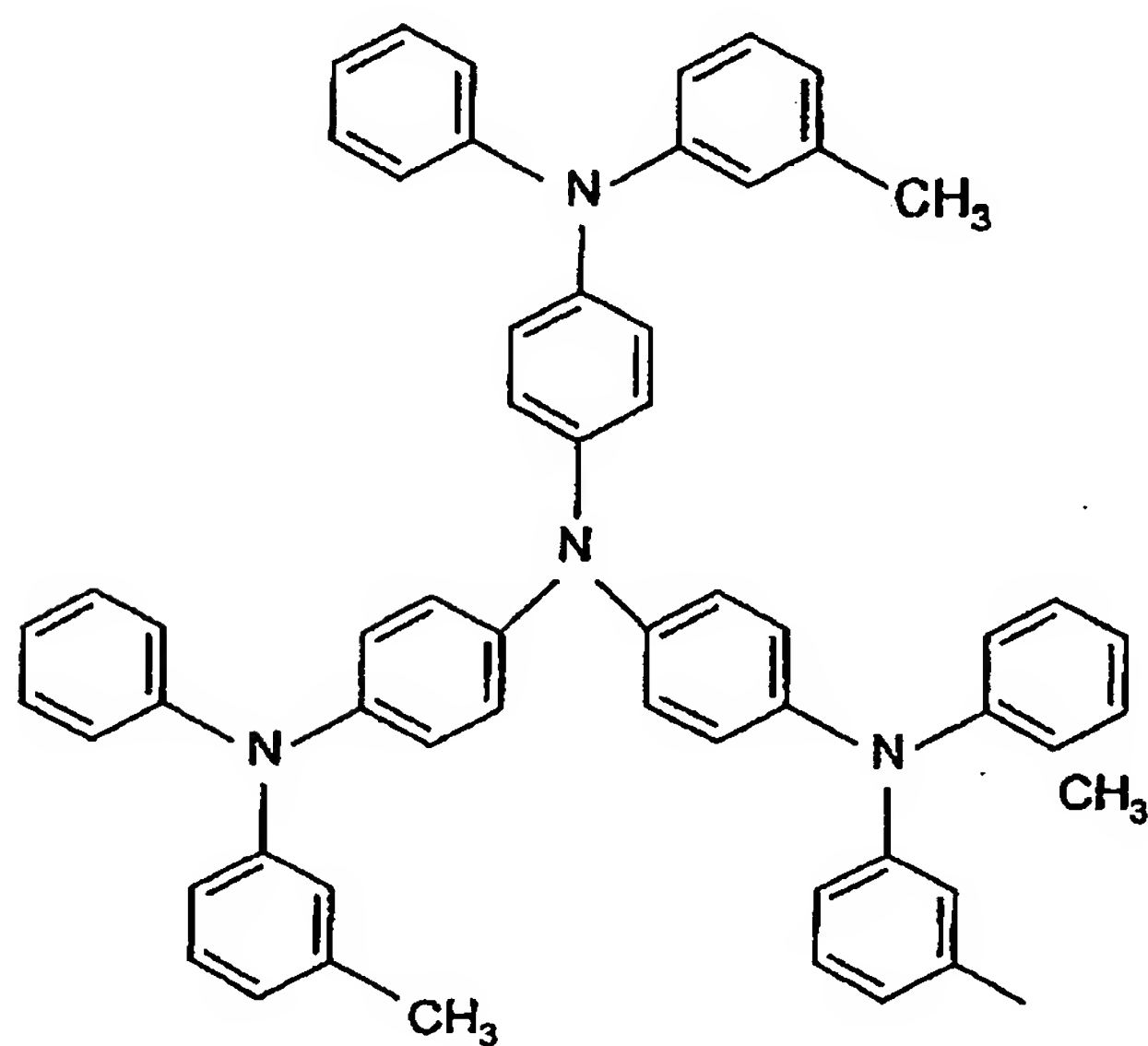


Fig. 7

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 $\alpha$ -NPB

TPD



mTADATA

Fig. 8



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ITO (165 nm)/CuPc (25 nm)/ $\alpha$ -NPB (40 nm)/TCTA : Compound A (38 : 2.1 nm)/Liq (30 nm)/LiF (0.5 nm)/Al

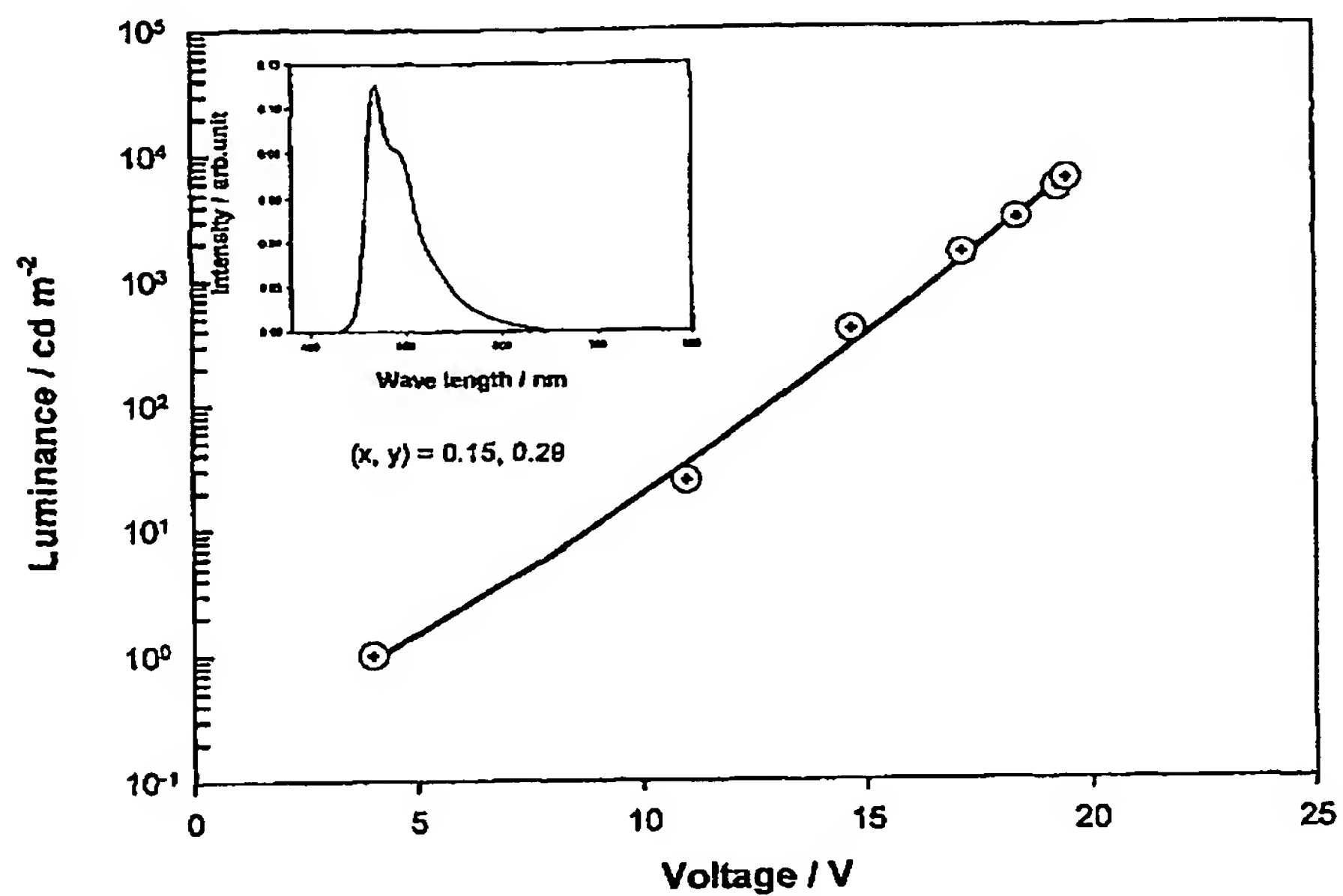


Fig. 9a

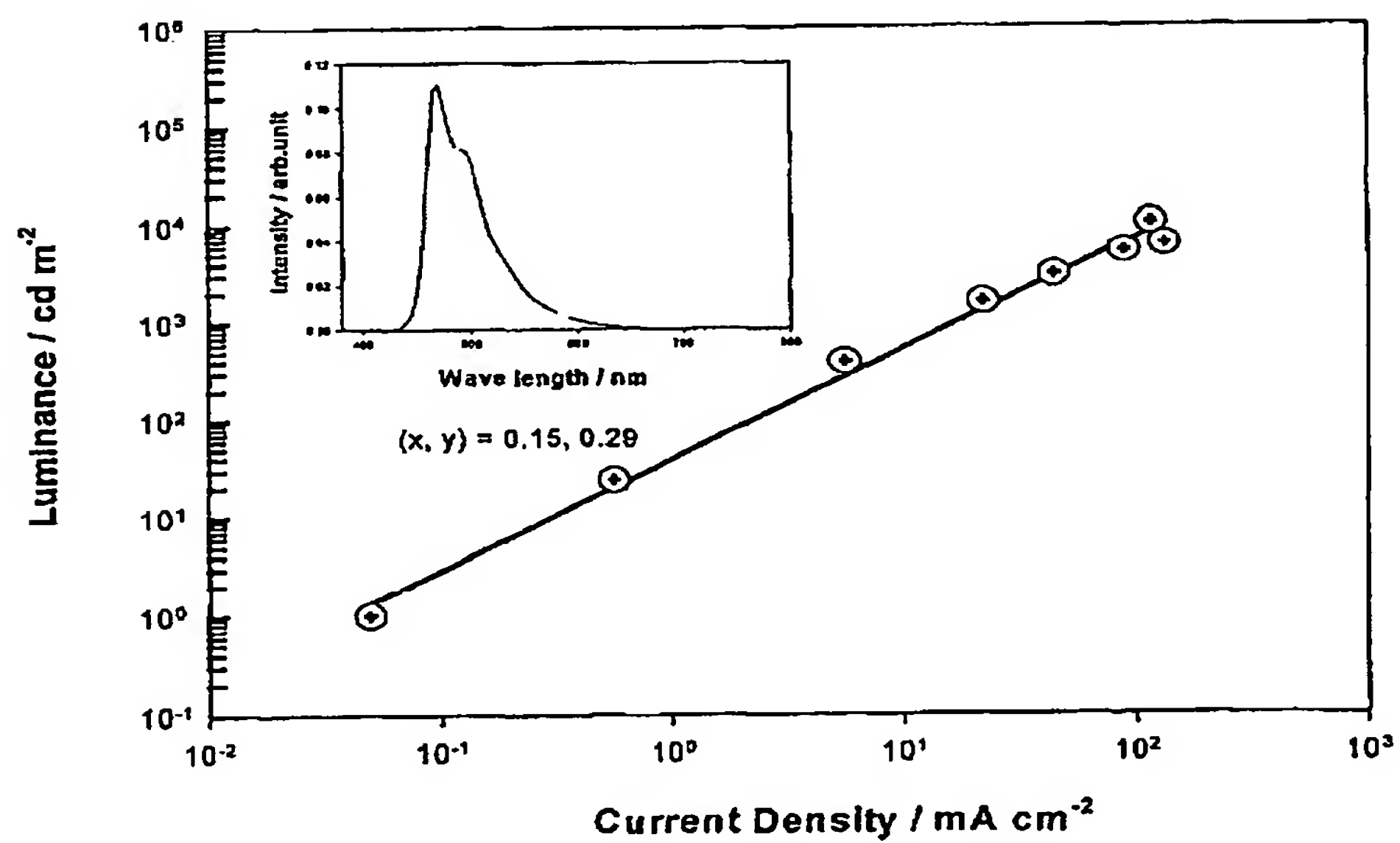


Fig. 9b

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ITO (165 nm)/CuPc (25 nm)/ $\alpha$ -NPB (40 nm)/TCTA : Compound A (38 : 2.1 nm)/Liq (30 nm)/LiF (0.5 nm)/Al

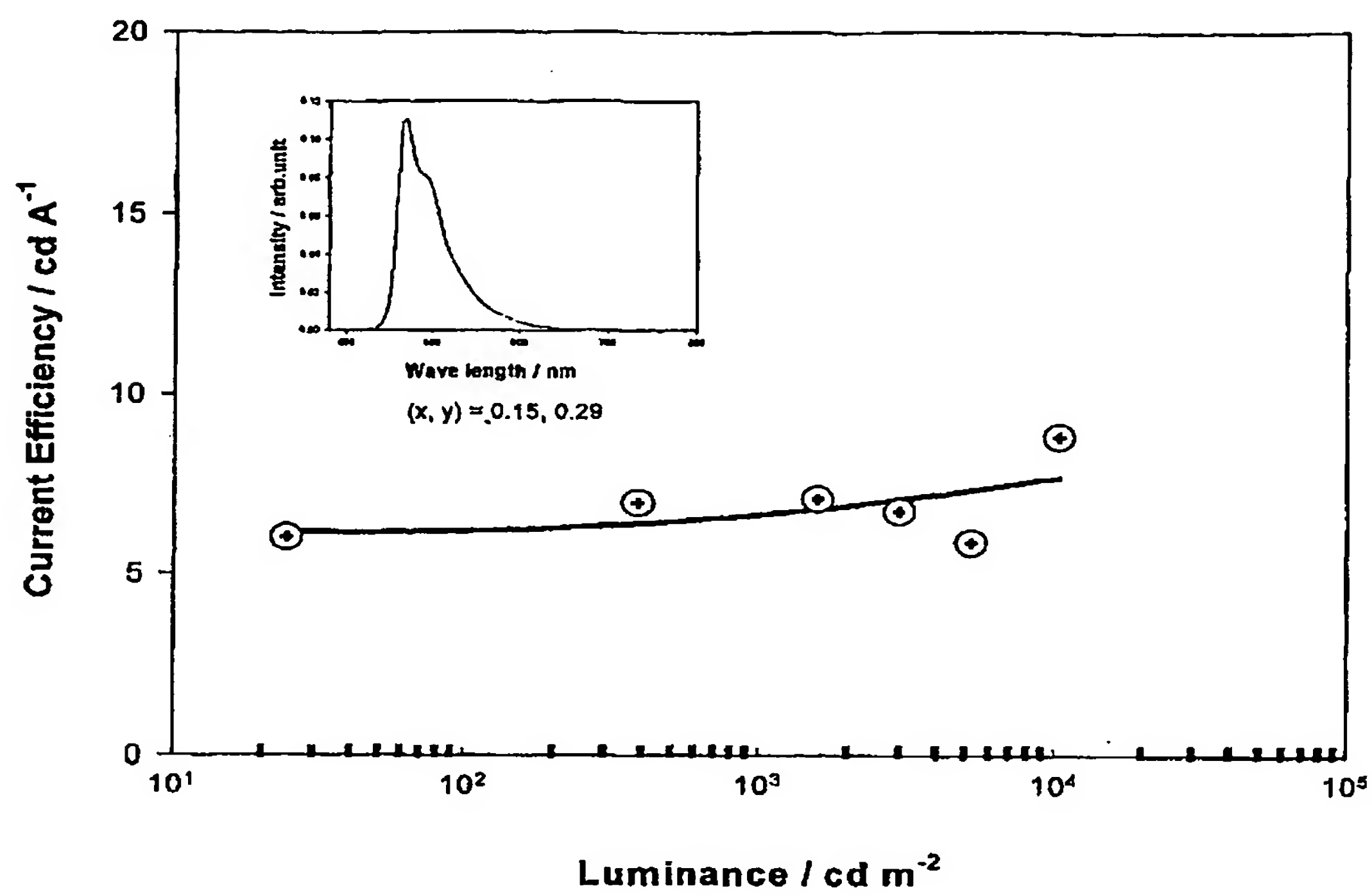


Fig. 9c

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ITO (165 nm)/CuPc (25 nm)/ $\alpha$ -NPB (40 nm)/TCTA : Compound F (37 : 3 nm)/Compound B (3 nm)/Zr<sub>q</sub> (30 nm)/LiF (0.5 nm)/Al

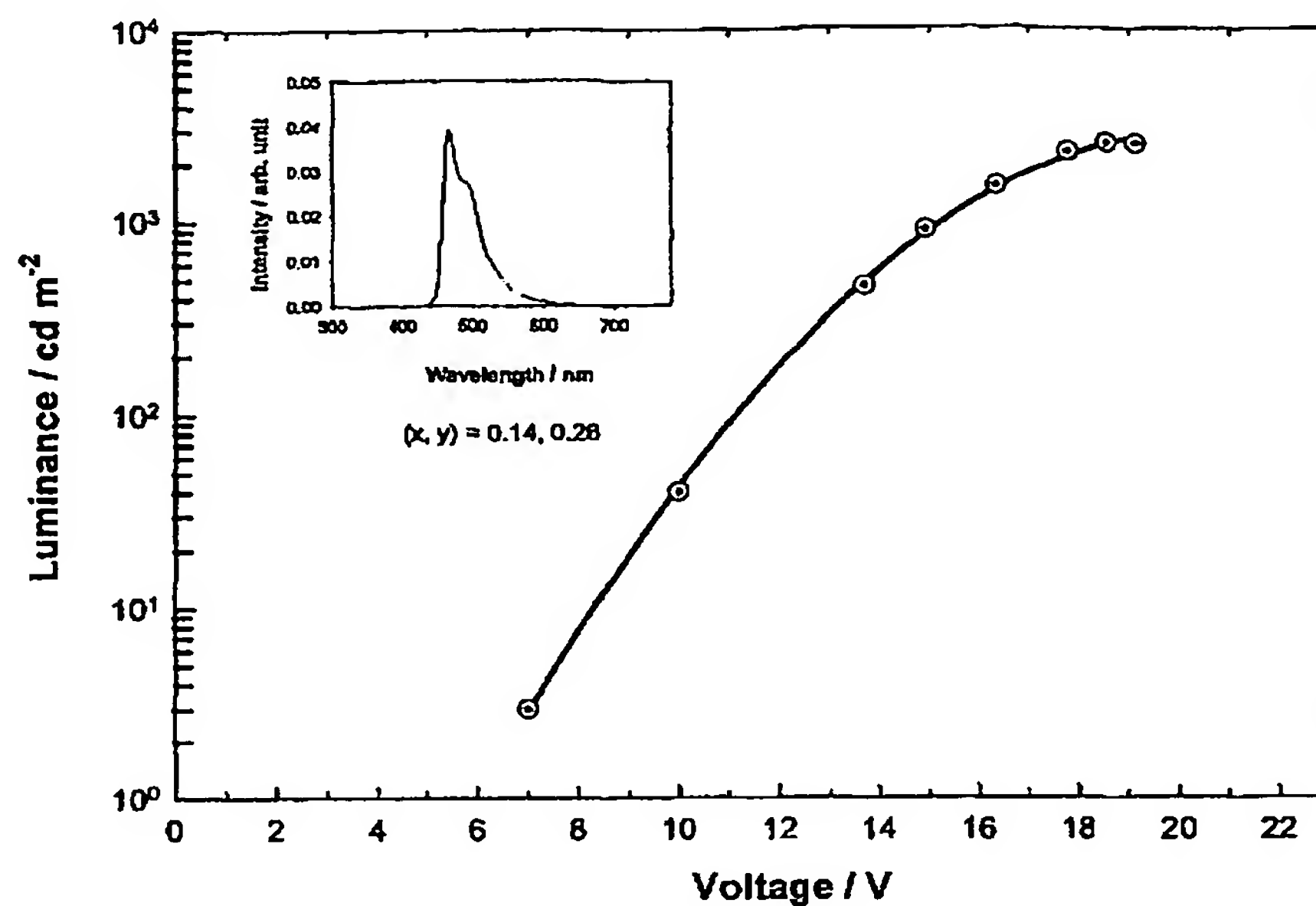


Fig. 10a

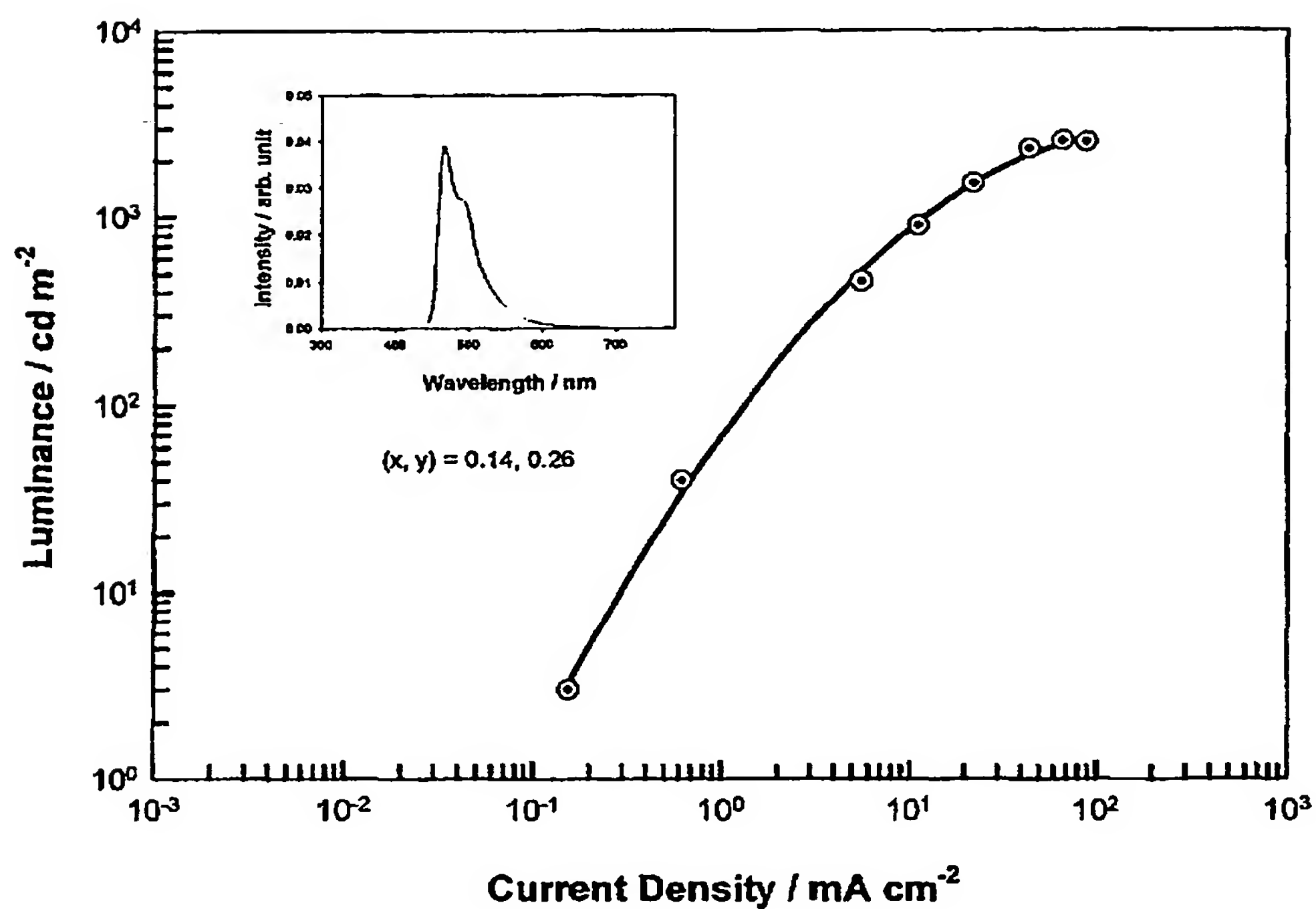


Fig. 10b

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ITO (165 nm)/CuPc (25 nm)/ $\square$ -NPB (40 nm)/TCTA : Compound F (37 : 3 nm)/Compound B (3 nm)/Zr<sub>q</sub>4 (30 nm)/LiF (0.5 nm)/Al

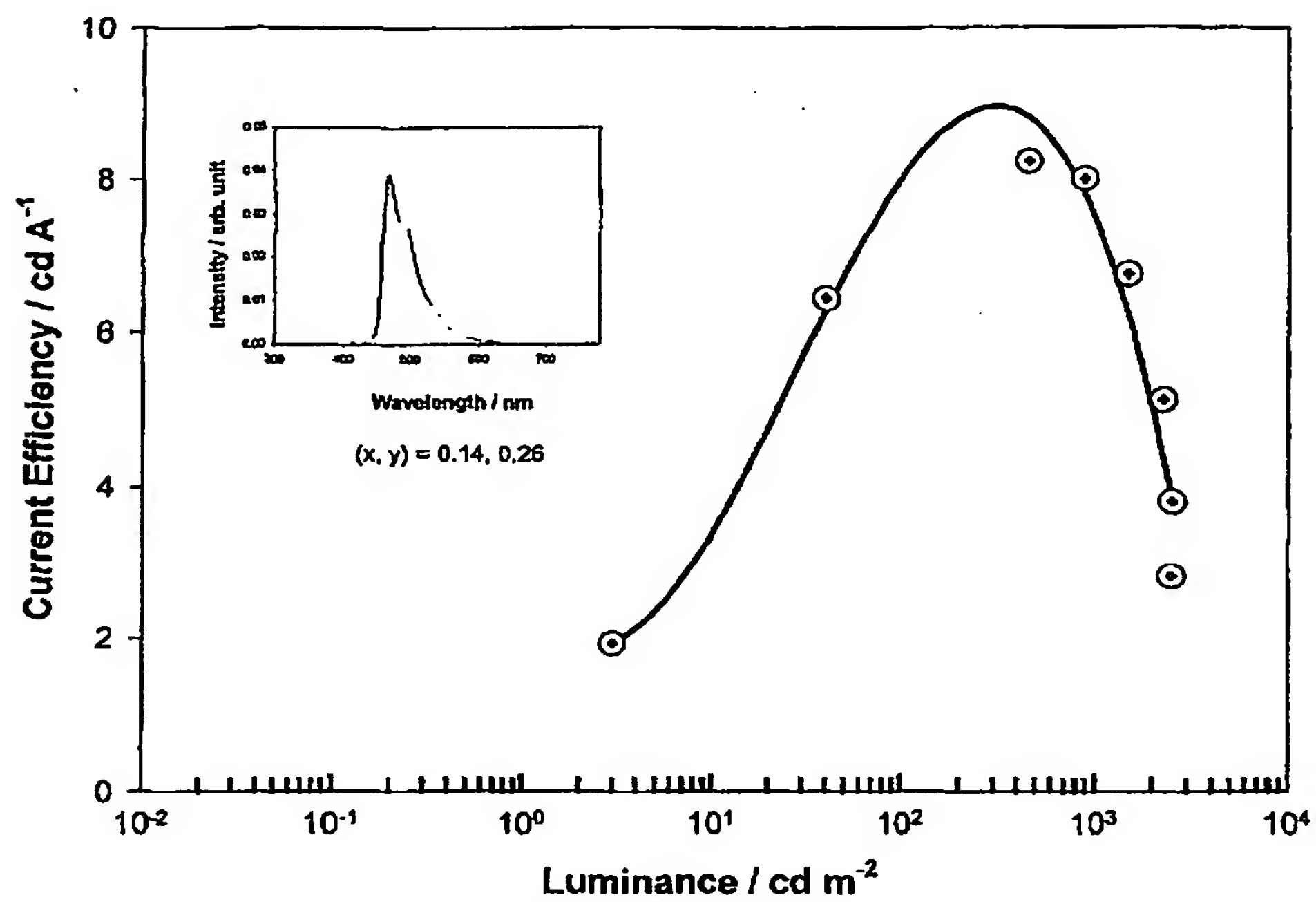


Fig. 10c

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ITO (165 nm)/CuPc (25 nm)/ $\alpha$ -NPB (60 nm)/CBP : Compound D (20 : 1.3 nm)/BCP (6 nm)/Alq<sub>3</sub> (40 nm)/LiF (0.2

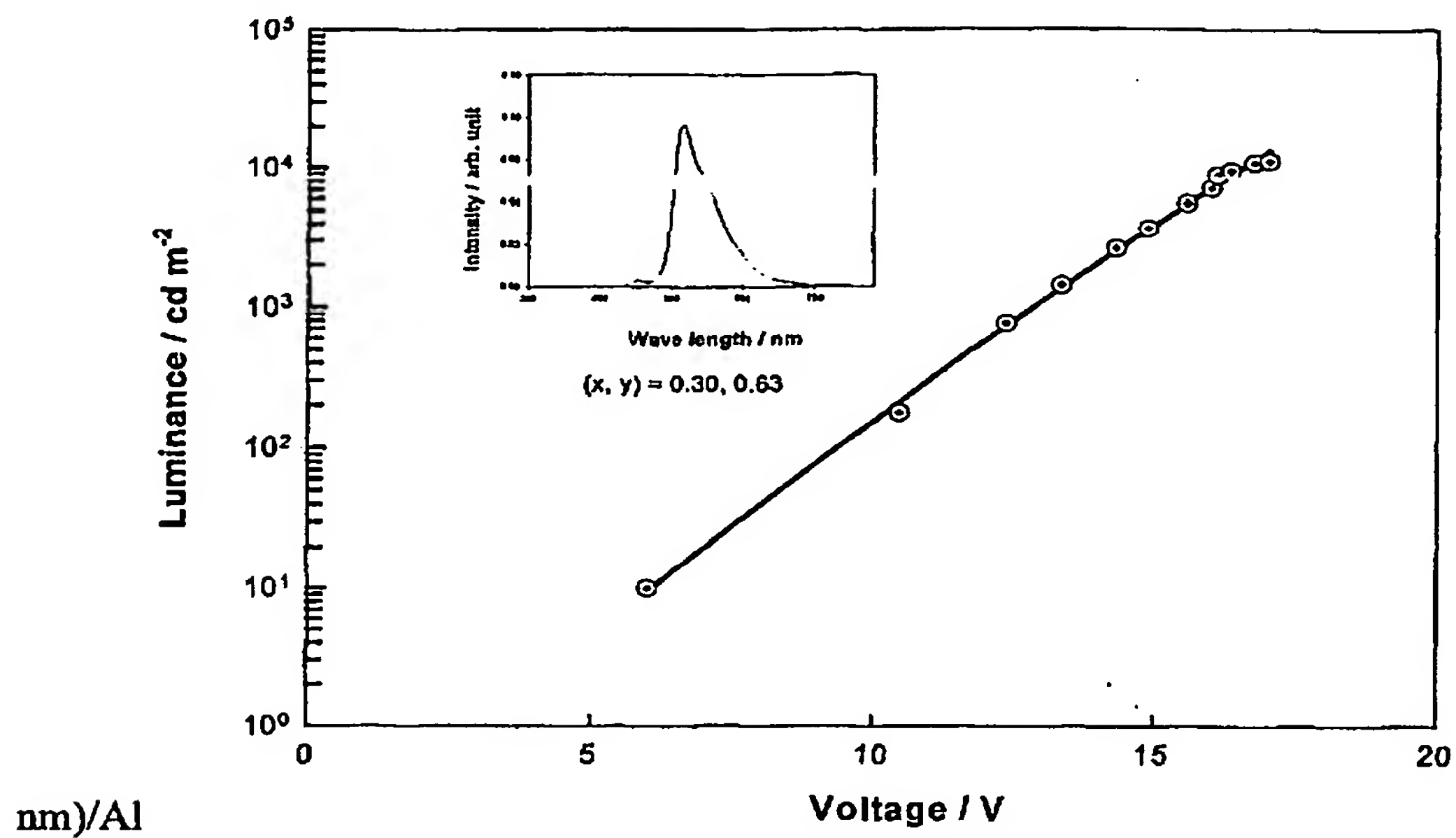


Fig. 11a

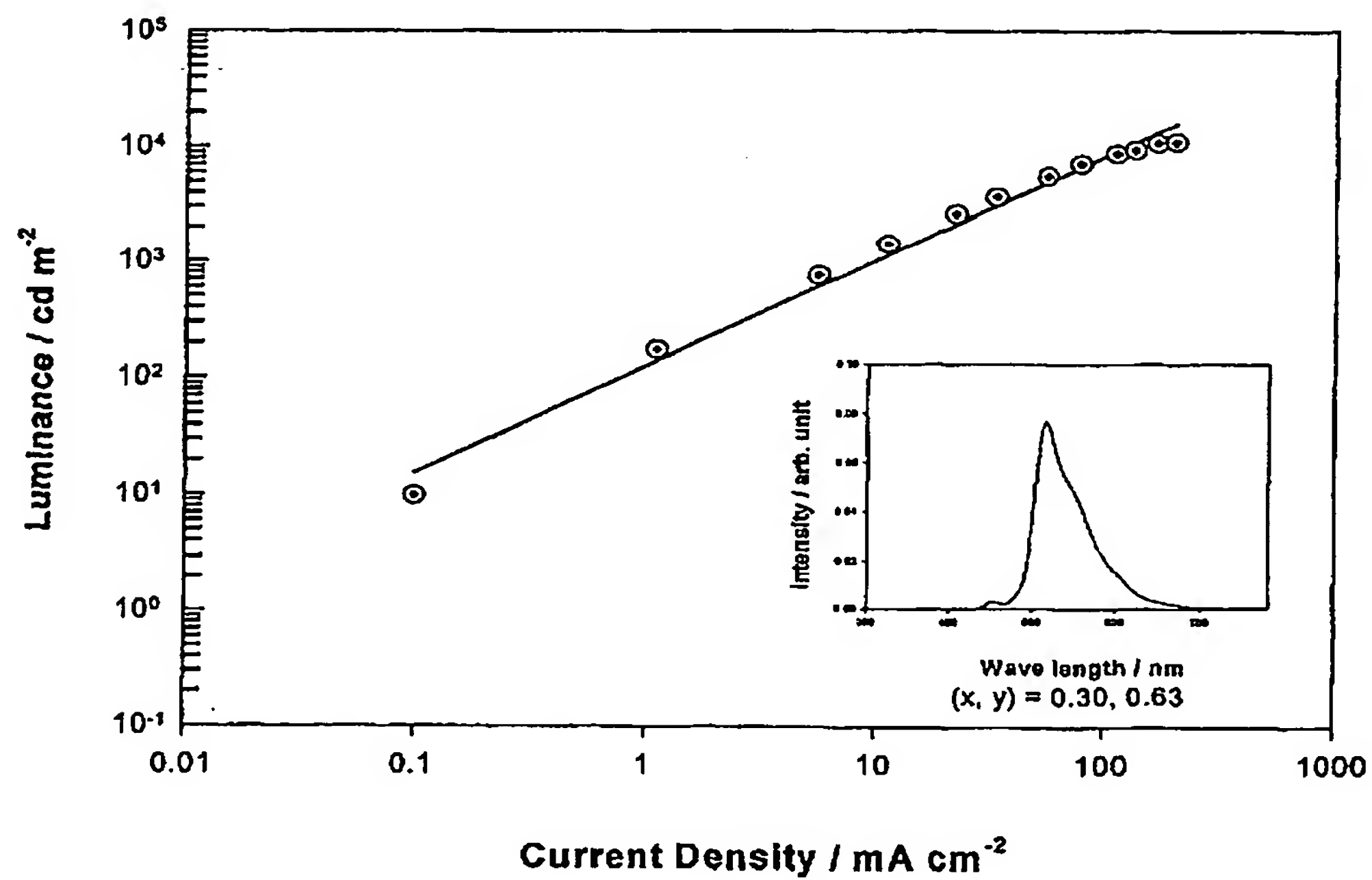


Fig. 11b

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ITO (165 nm)/CuPc (25 nm)/ $\alpha$ -NPB (60 nm)/CBP : Compound J (20 : 1.3 nm)/BCP (6 nm)/Alq<sub>3</sub> (40 nm)/LiF (0.2 nm)/Al

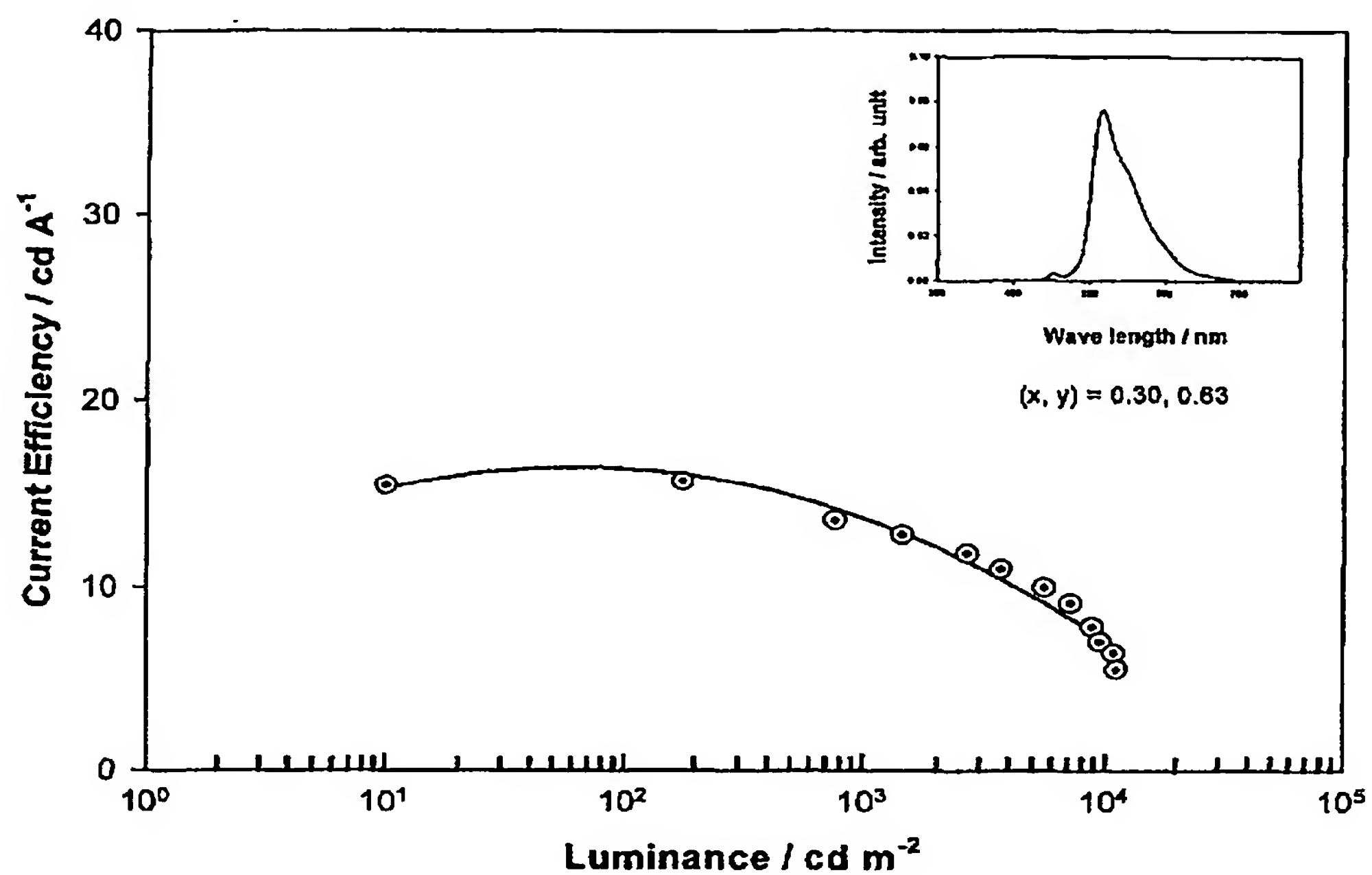


Fig. 11c

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ITO (165 nm)/CuPc (25 nm)/ $\alpha$ -NPB (40 nm)/CBP : Compound D (20 : 0.6 nm)/BCP (6 nm)/LiQ (40 nm)/LiF (0.5 nm)/Al

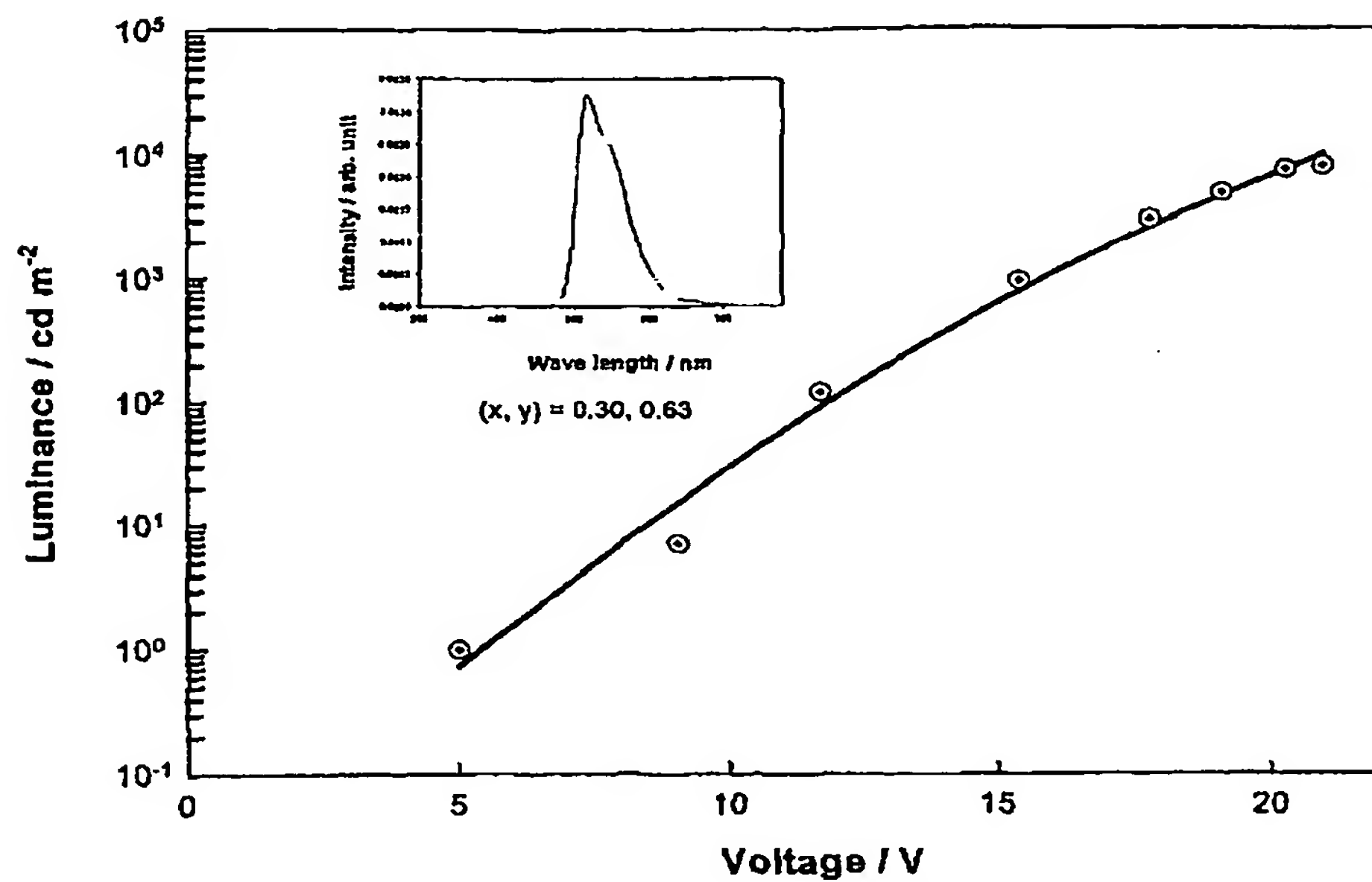


Fig. 12a

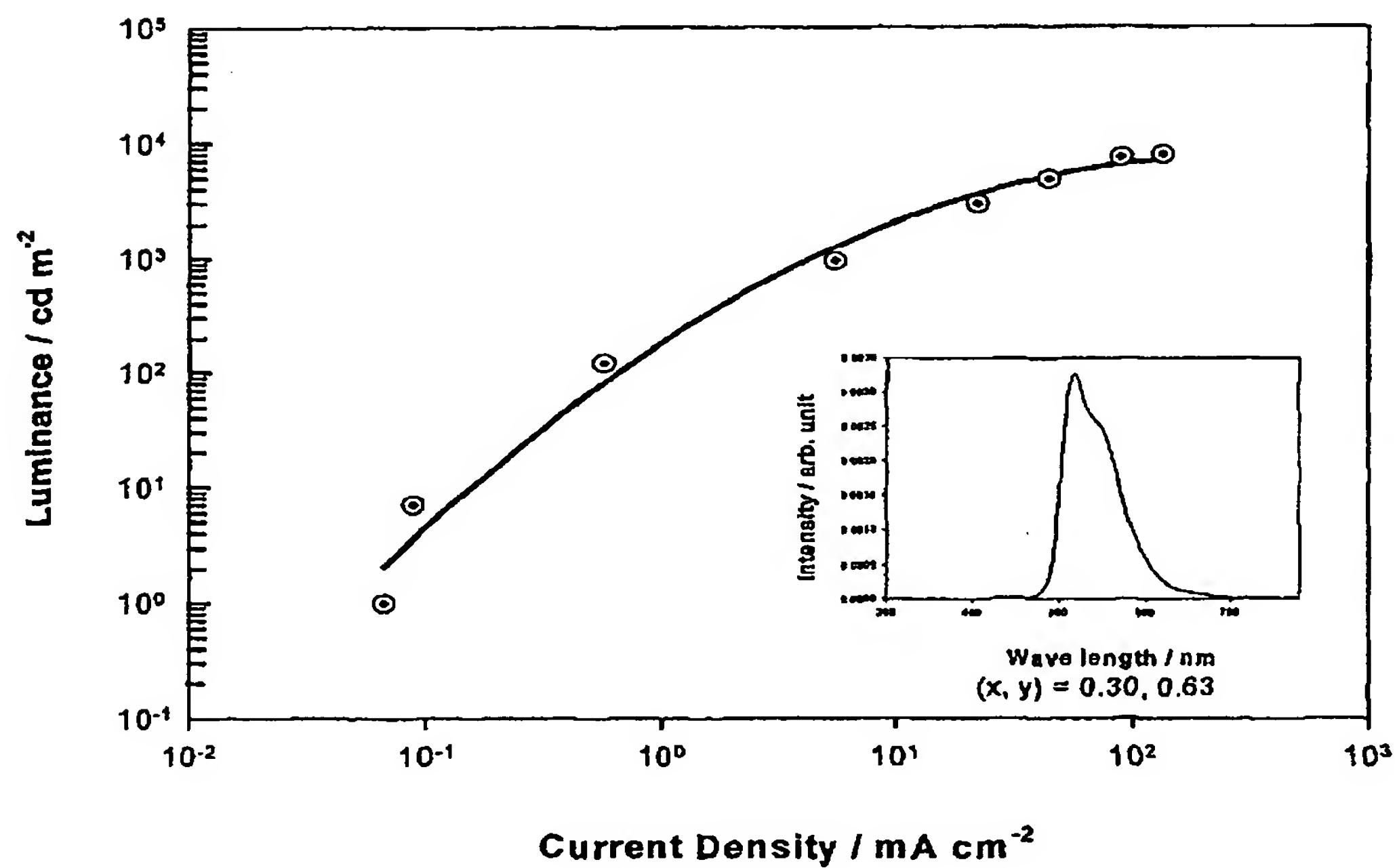


Fig. 12b

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ITO (165 nm)/CuPc (25 nm)/ $\alpha$ -NPB (40 nm)/CBP : Compound D (20 : 0.6 nm)/BCP (6 nm)/Liq (40 nm)/LiF (0.5 nm)/Al

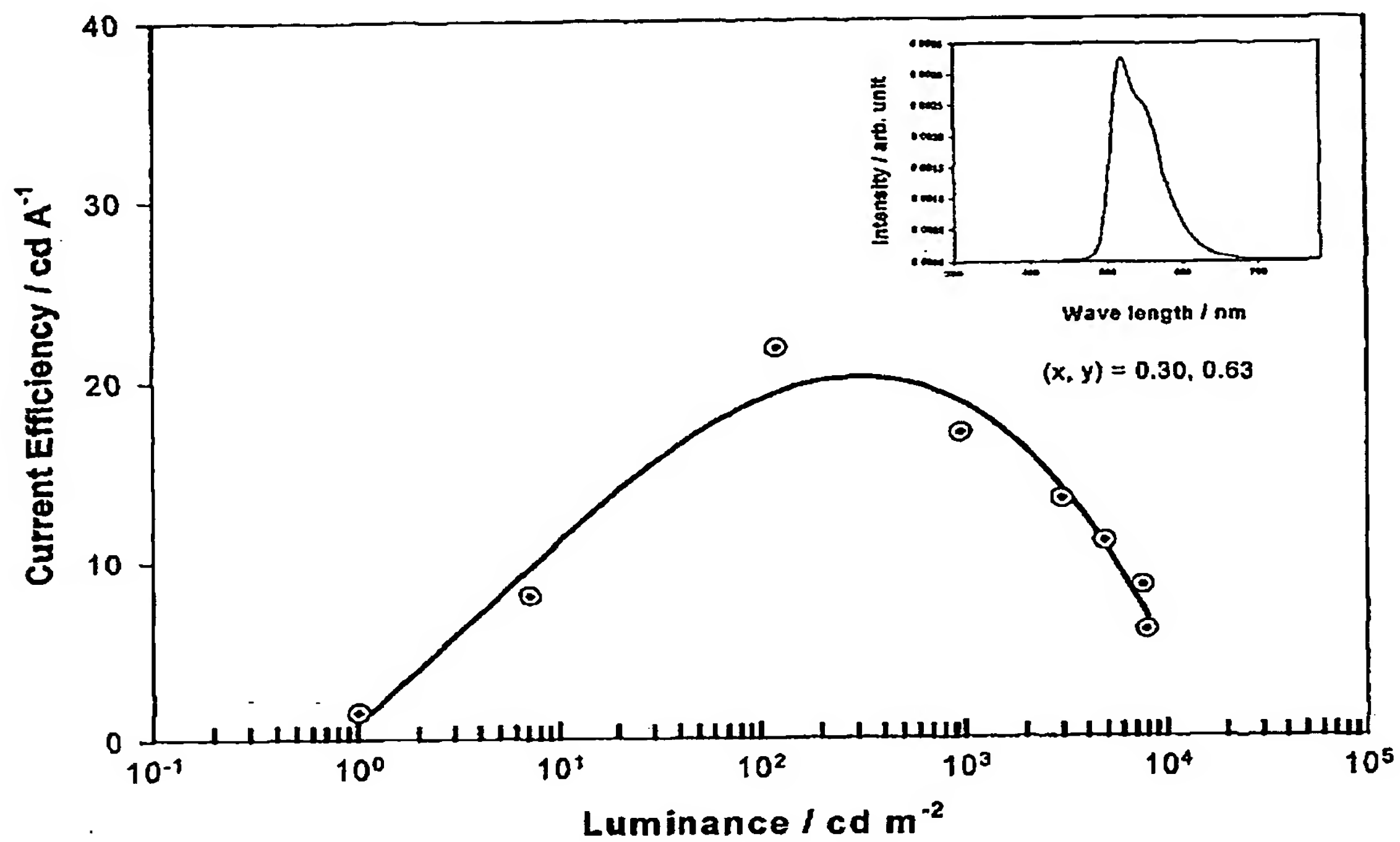


Fig. 12c



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ITO (165 nm)/ $\alpha$ -NPB (40 nm)/CBP : Compound D (20 : 7 nm)/BCP (10 nm)/Zr<sub>q</sub>4 (50 nm)/LiF (0.5 nm)/Al

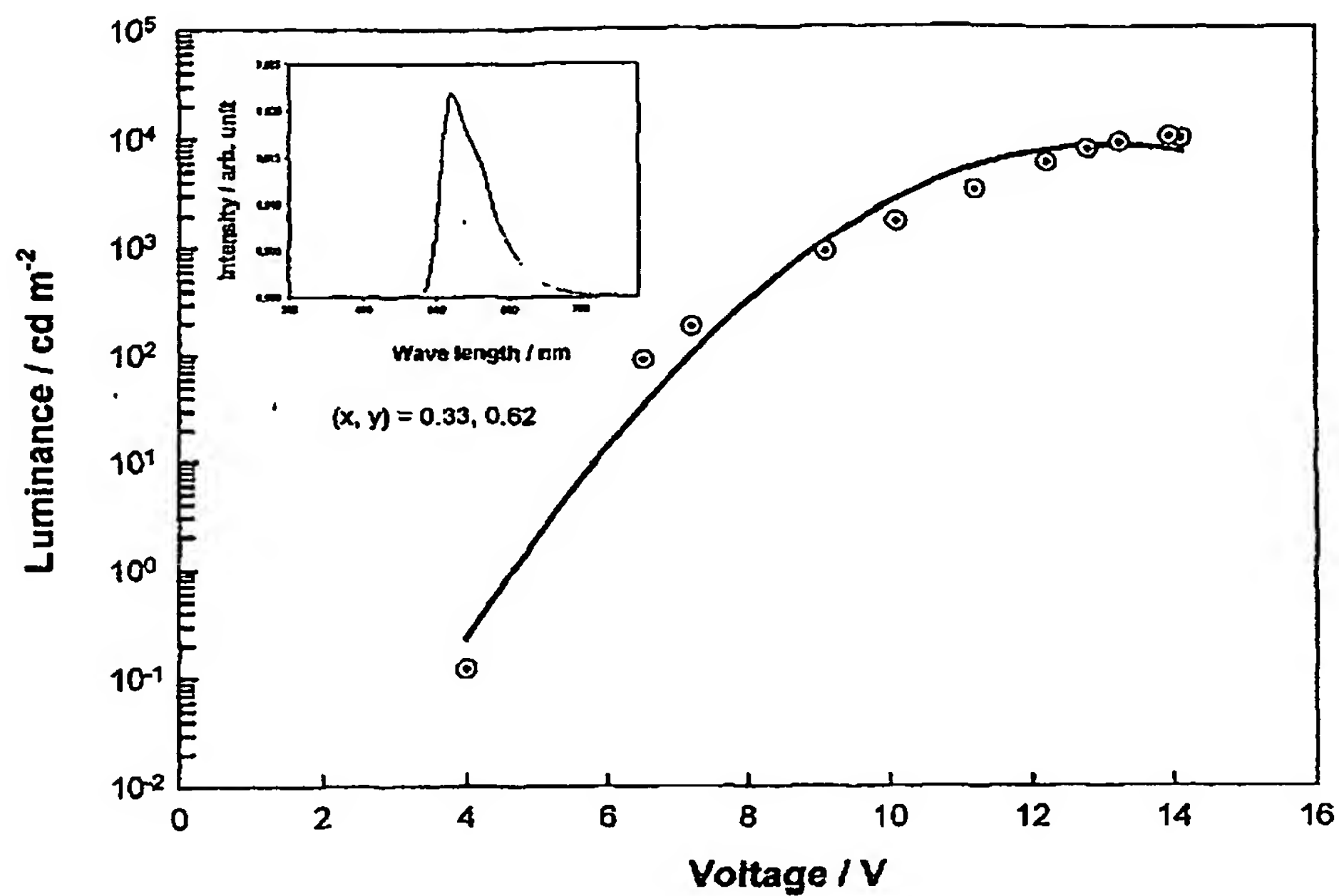


Fig. 13a

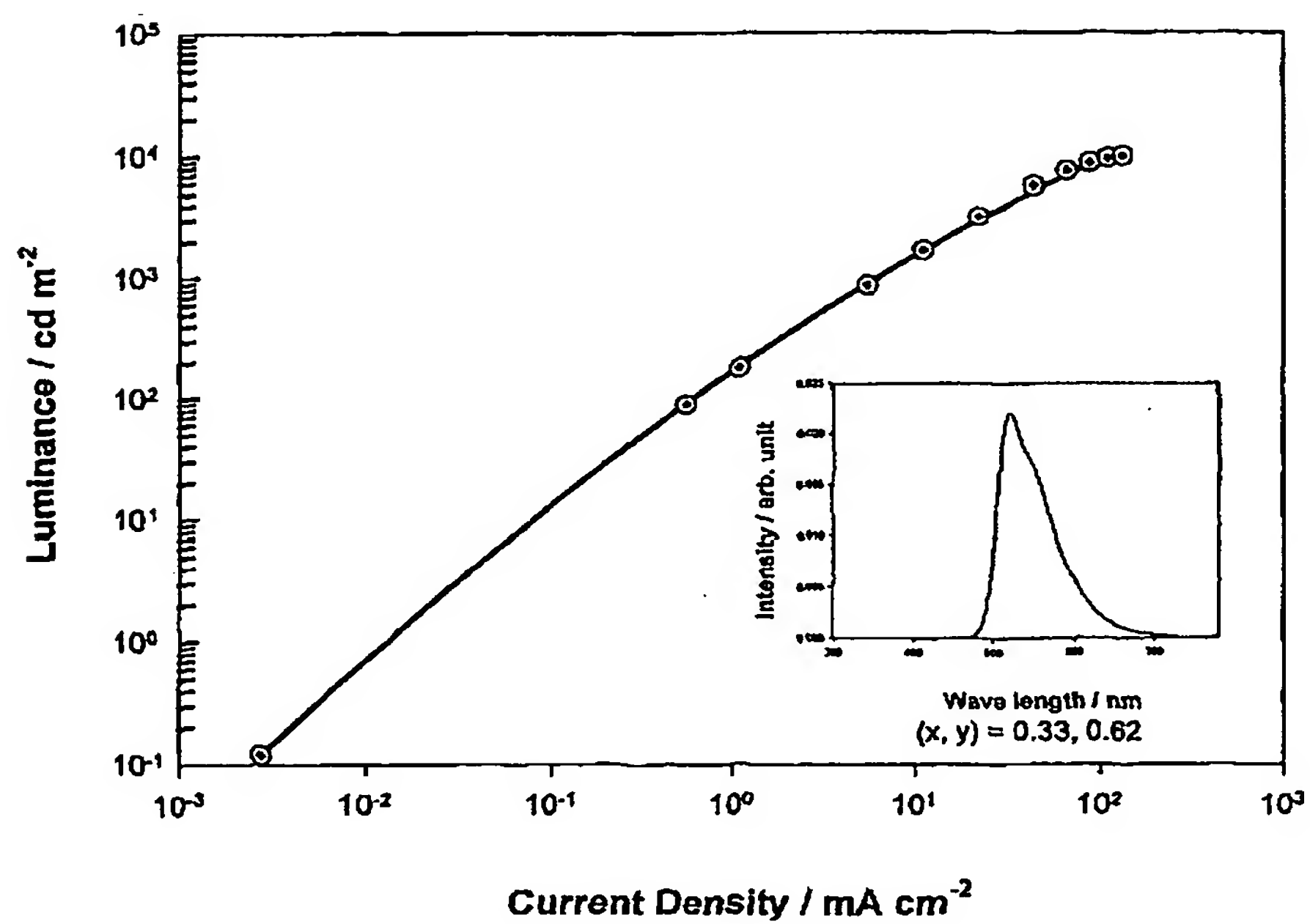


Fig. 13b

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ITO (165 nm)/ $\alpha$ -NPB (40 nm)/CBP : Compound D (20 : 7 nm)/BCP (10 nm)/Zr<sub>q</sub>4 (50 nm)/LiF (0.5 nm)/Al

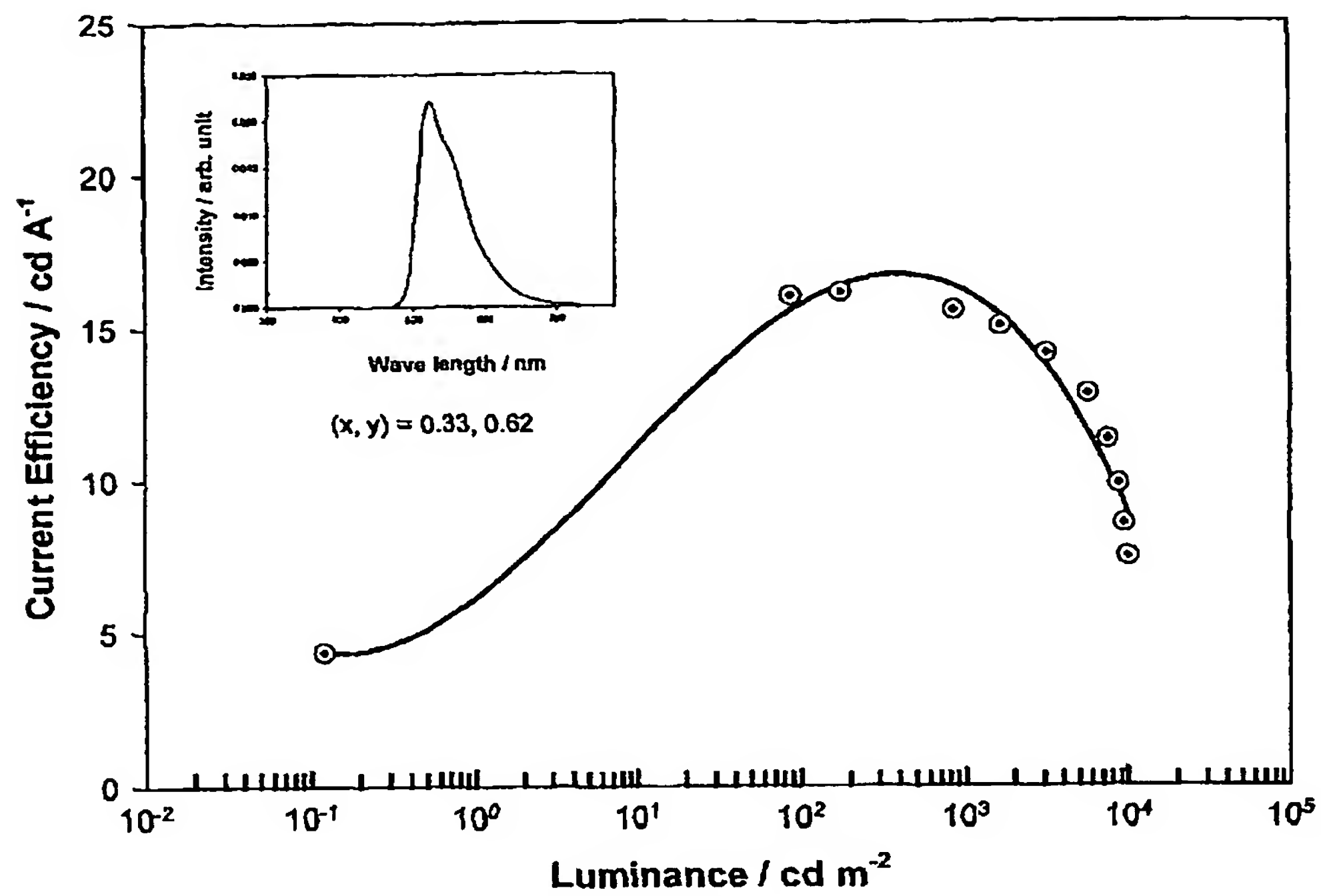


Fig. 13c

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ITO (165 nm)/CuPc (25 nm)/ $\alpha$ -NPB (40 nm)/TCTA : Compound C (40 : 0.8 nm)/Liq (30 nm)/LiF (0.5 nm)/Al

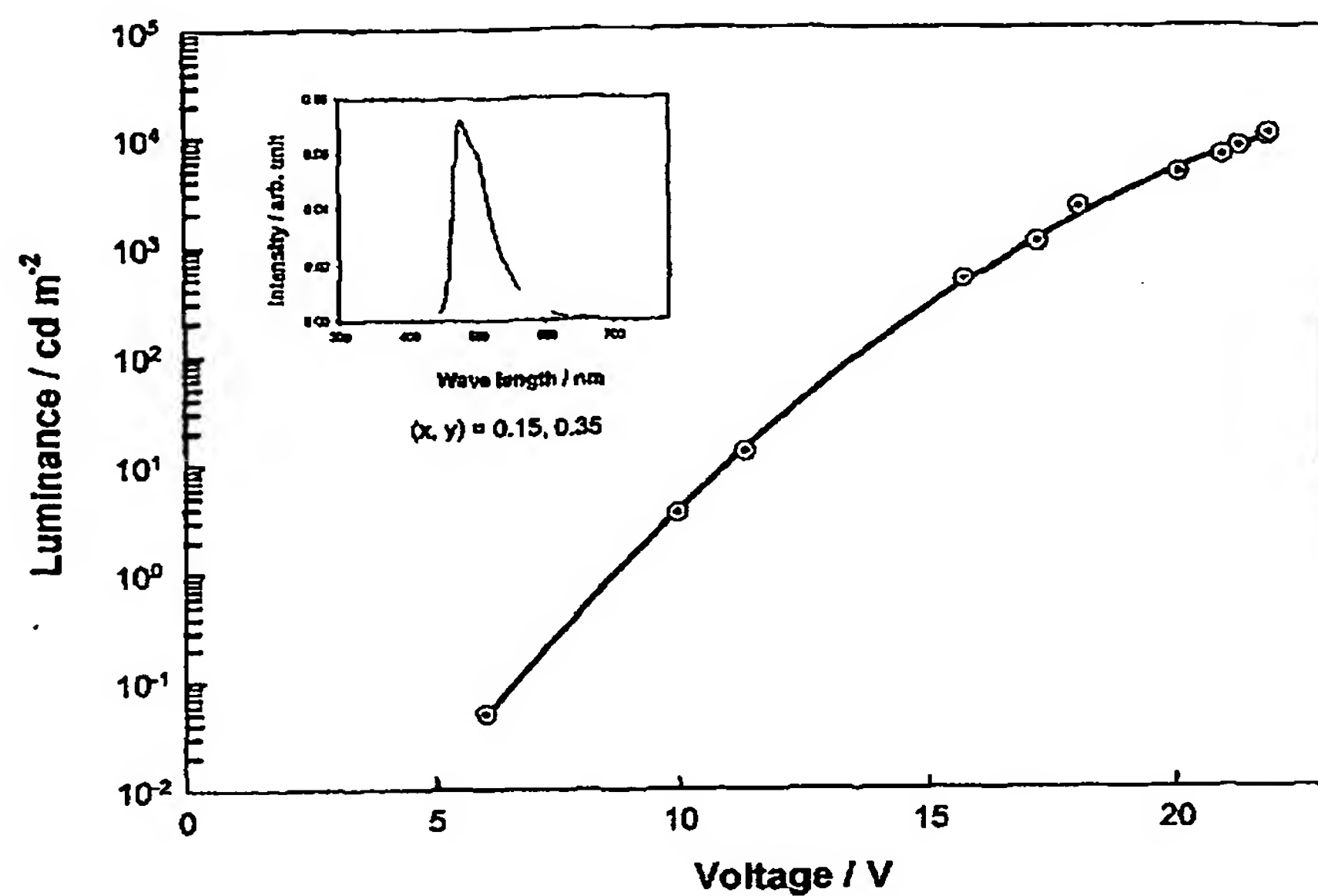


Fig. 14a

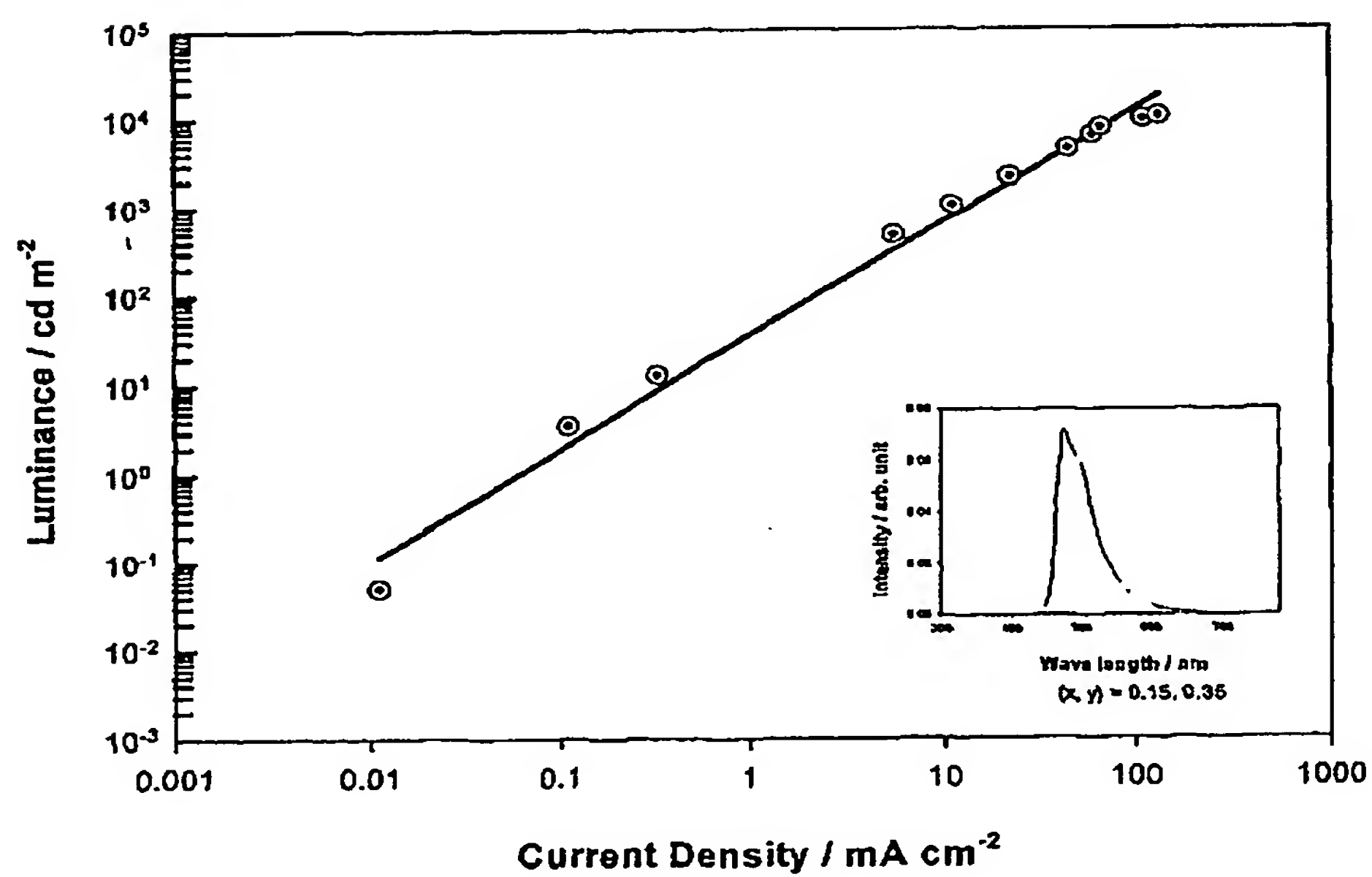


Fig. 14b

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ITO (165 nm)/CuPc (25 nm)/ $\alpha$ -NPB (40 nm)/TCTA : Compound C (40 : 0.8 nm)/Li<sub>q</sub> (30 nm)/LiF (0.5 nm)/Al

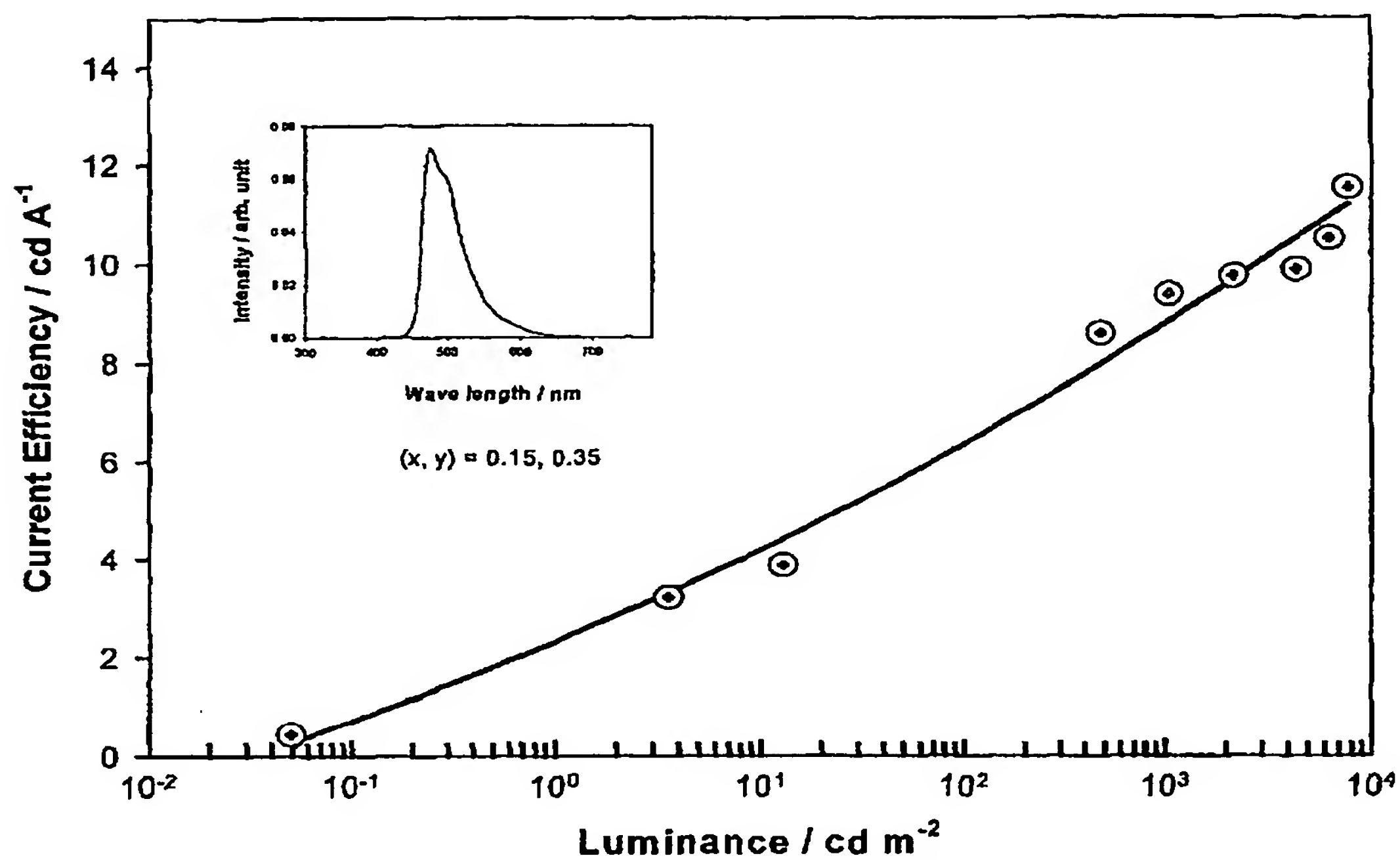


Fig. 14c

ITO (165 nm)/ $\alpha$ -NPB (40 nm)/CBP : Compound D (20 : 8.3 nm)/  
Compound F (10 nm)/Zr<sub>q</sub>4 (50 nm)/LiF (0.5 nm)/Al

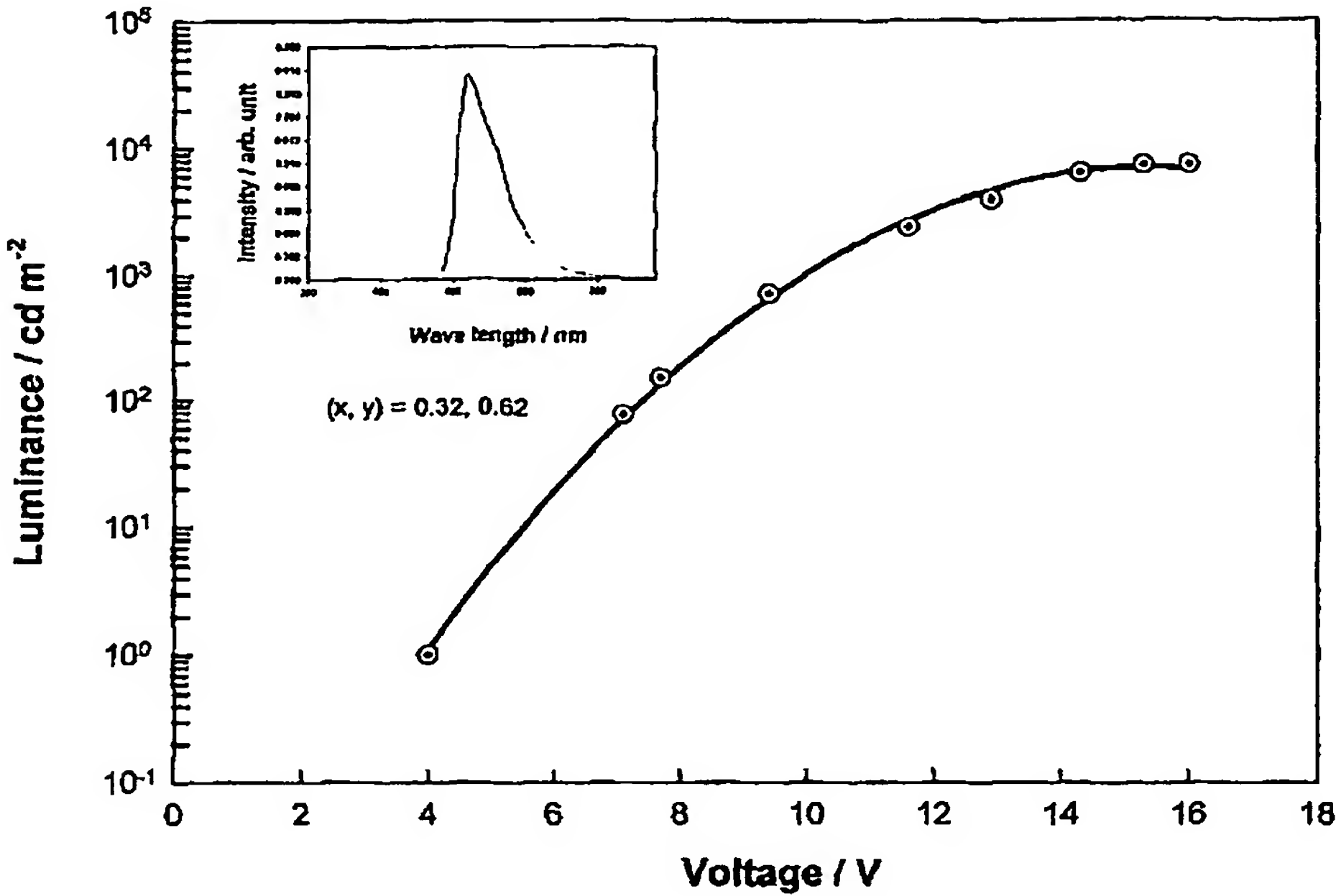


Fig. 15a

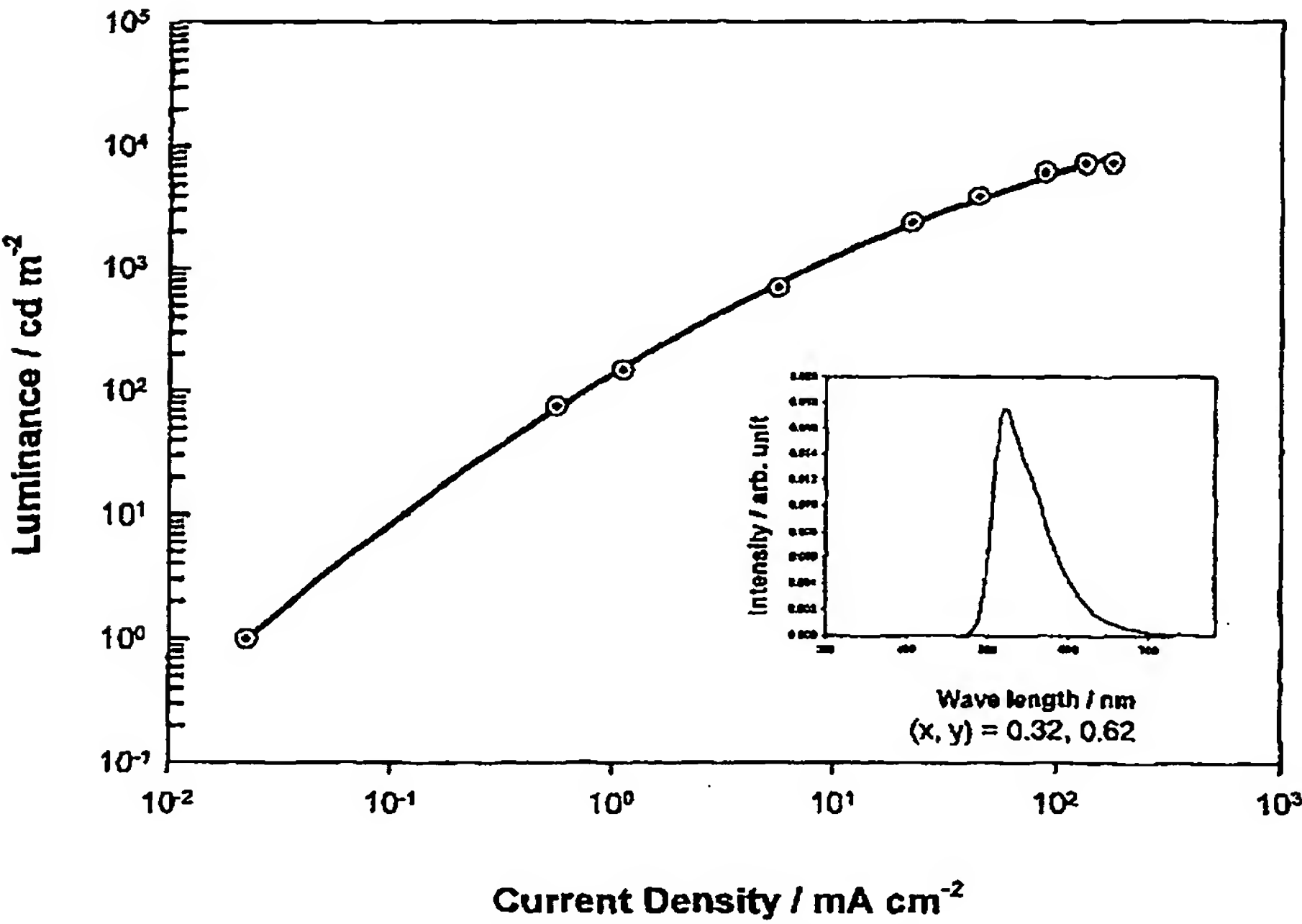


Fig. 15b

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ITO (165 nm)/ $\alpha$ -NPB (40 nm)/CBP : Compound D (20 : 8.3 nm)/  
Compound F (10 nm)/Zr<sub>q</sub><sub>4</sub> (50 nm)/LiF (0.5 nm)/Al

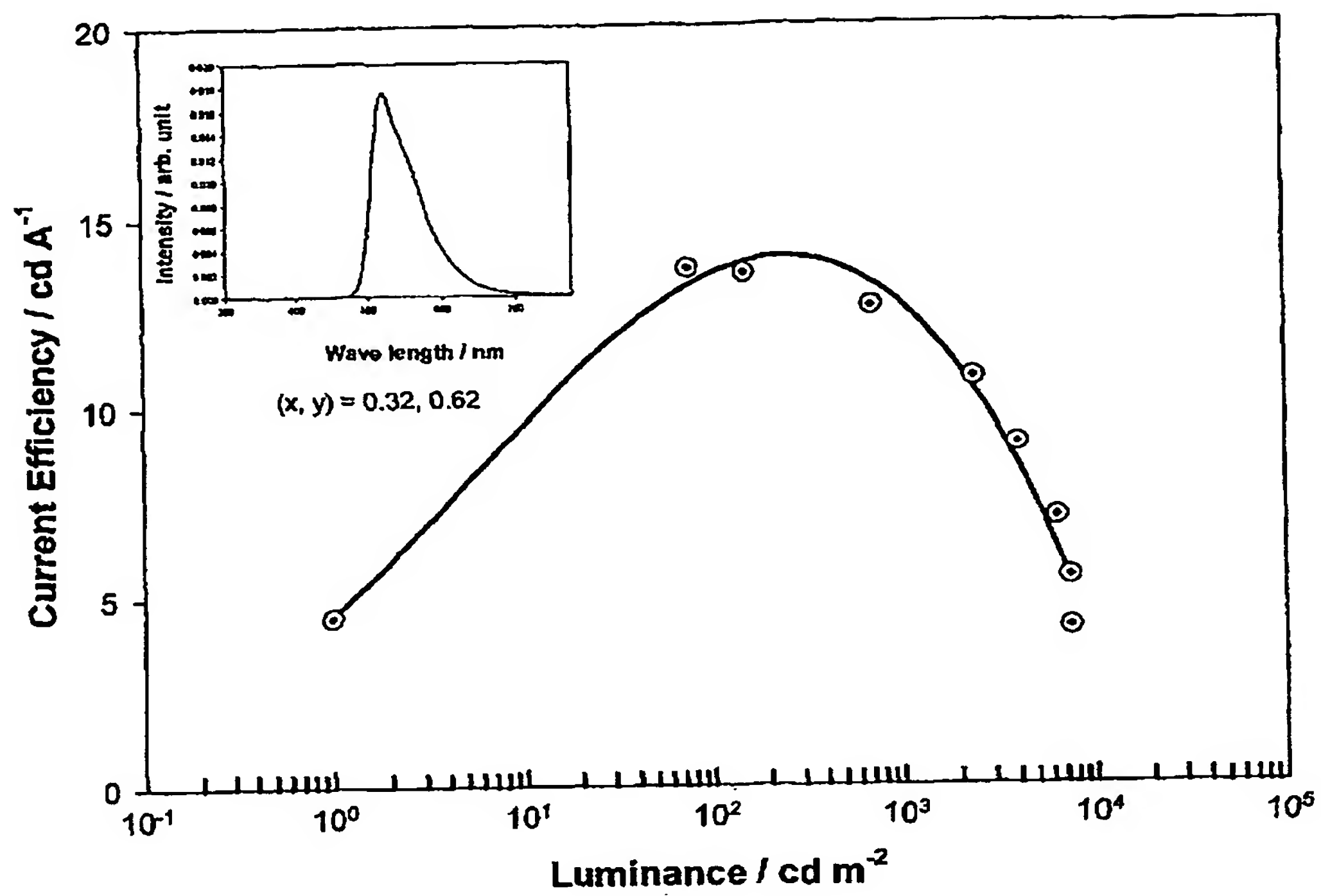


Fig. 15c

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ITO (165 nm)/CuPc (25 nm)/ $\alpha$ -NPB (40 nm)/CBP : Compound E (35 : 5 nm)/Zr<sub>q</sub>4 (30 nm)/LiF (0.5 nm)/Al

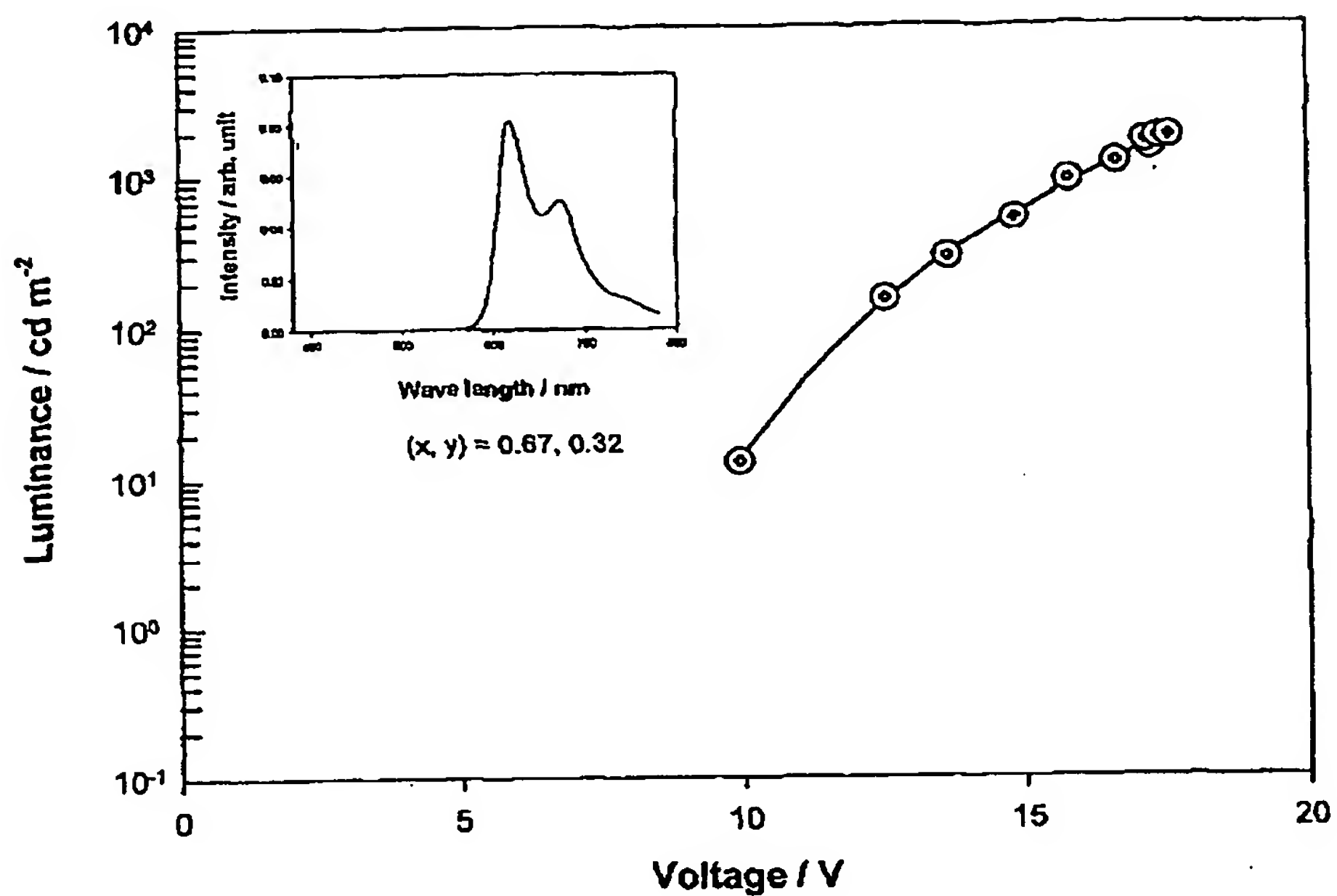


Fig. 16a

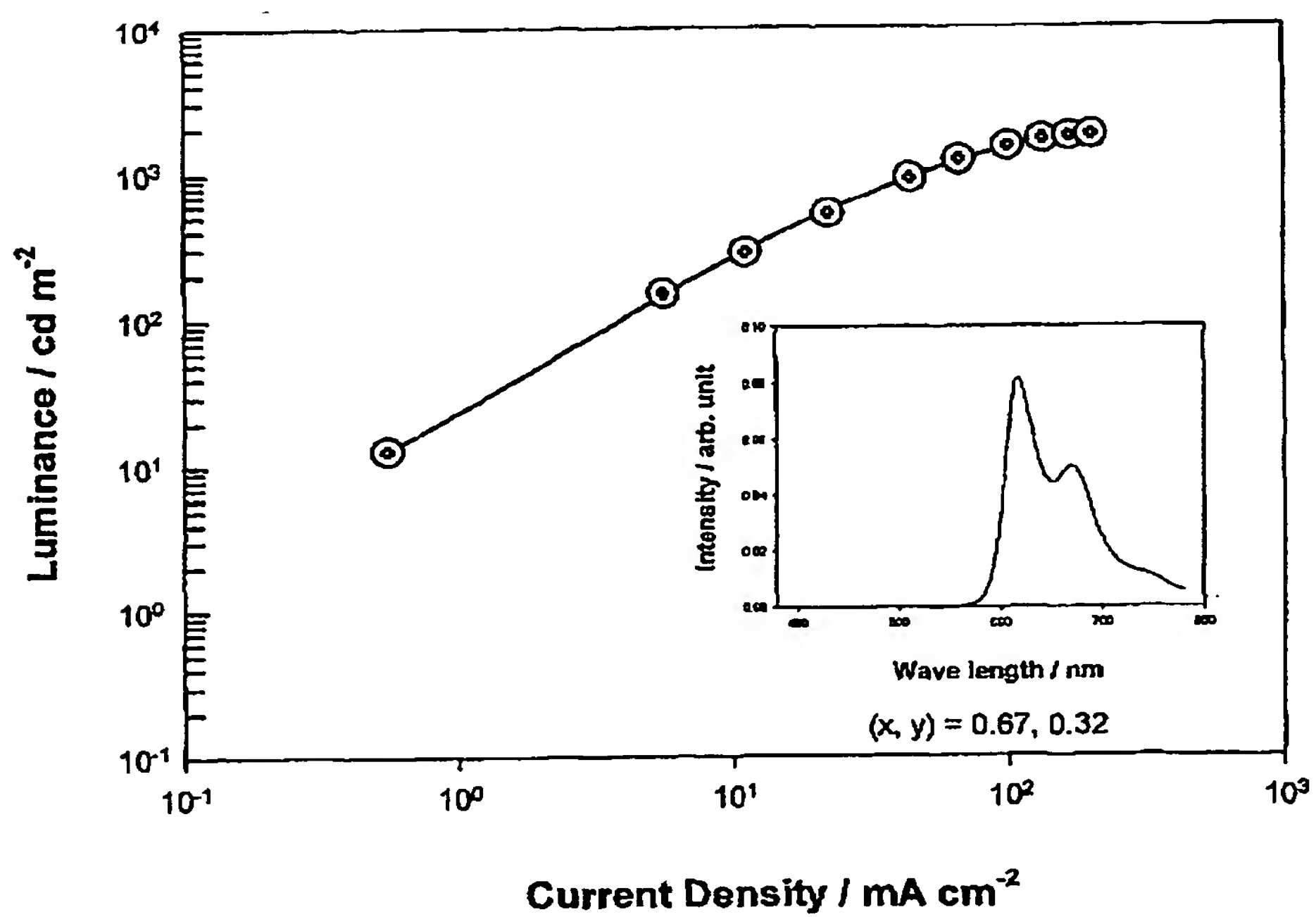


Fig. 16b

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ITO (165 nm)/CuPc (25 nm)/  $\alpha$ -NPB (40 nm)/CBP : Compound E (35 : 5 nm)/Zr<sub>q</sub><sub>4</sub> (30 nm)/LiF (0.5 nm)/Al

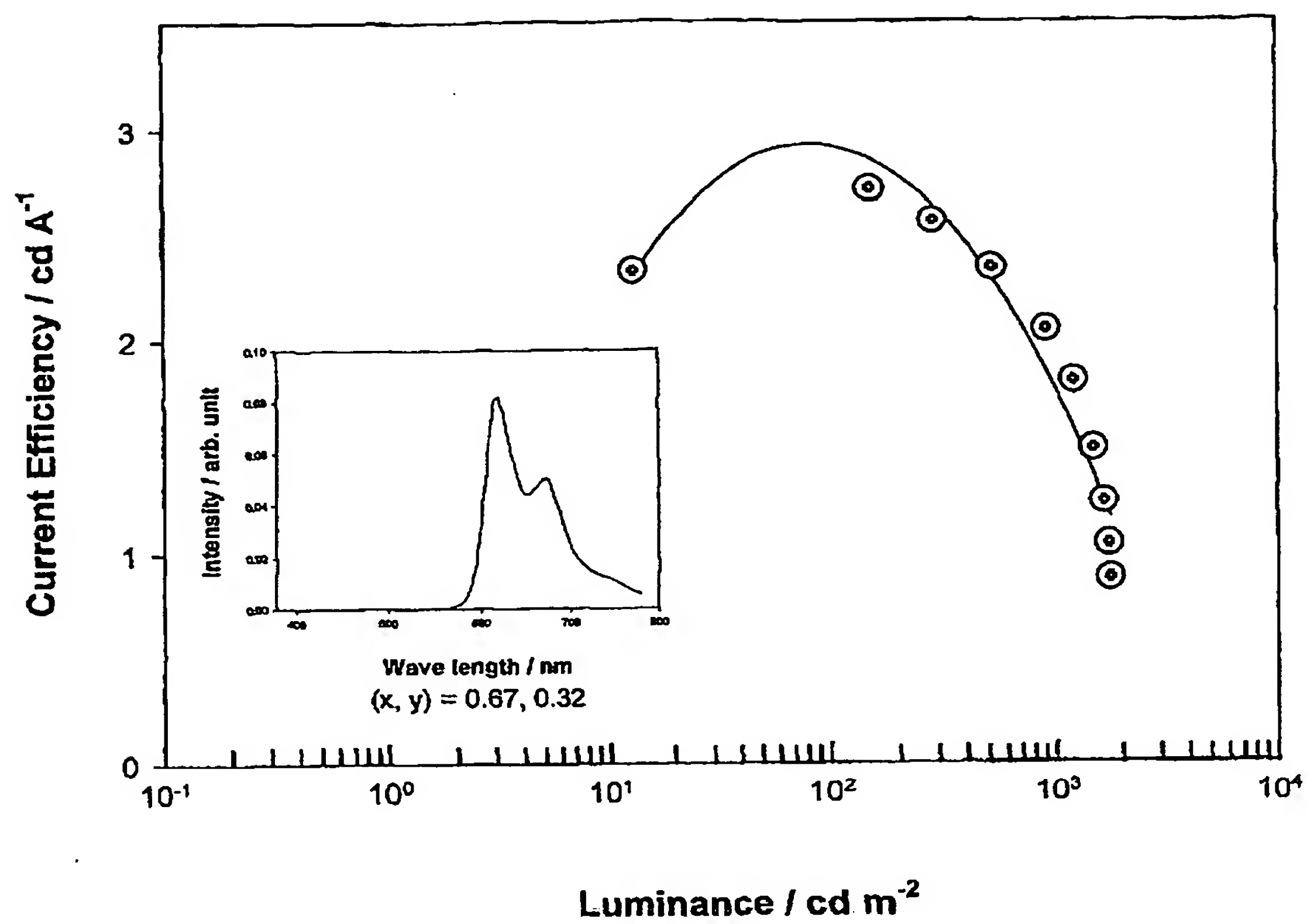


Fig. 16c



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ITO (165 nm)/CuPc (50 nm)/  $\alpha$ -NPB (40 nm)/CBP : Compound D (20 : 6.1 nm)/Compound F (10 nm)/Zr<sub>q</sub>4 (50 nm)/LiF (0.5 nm)/Al

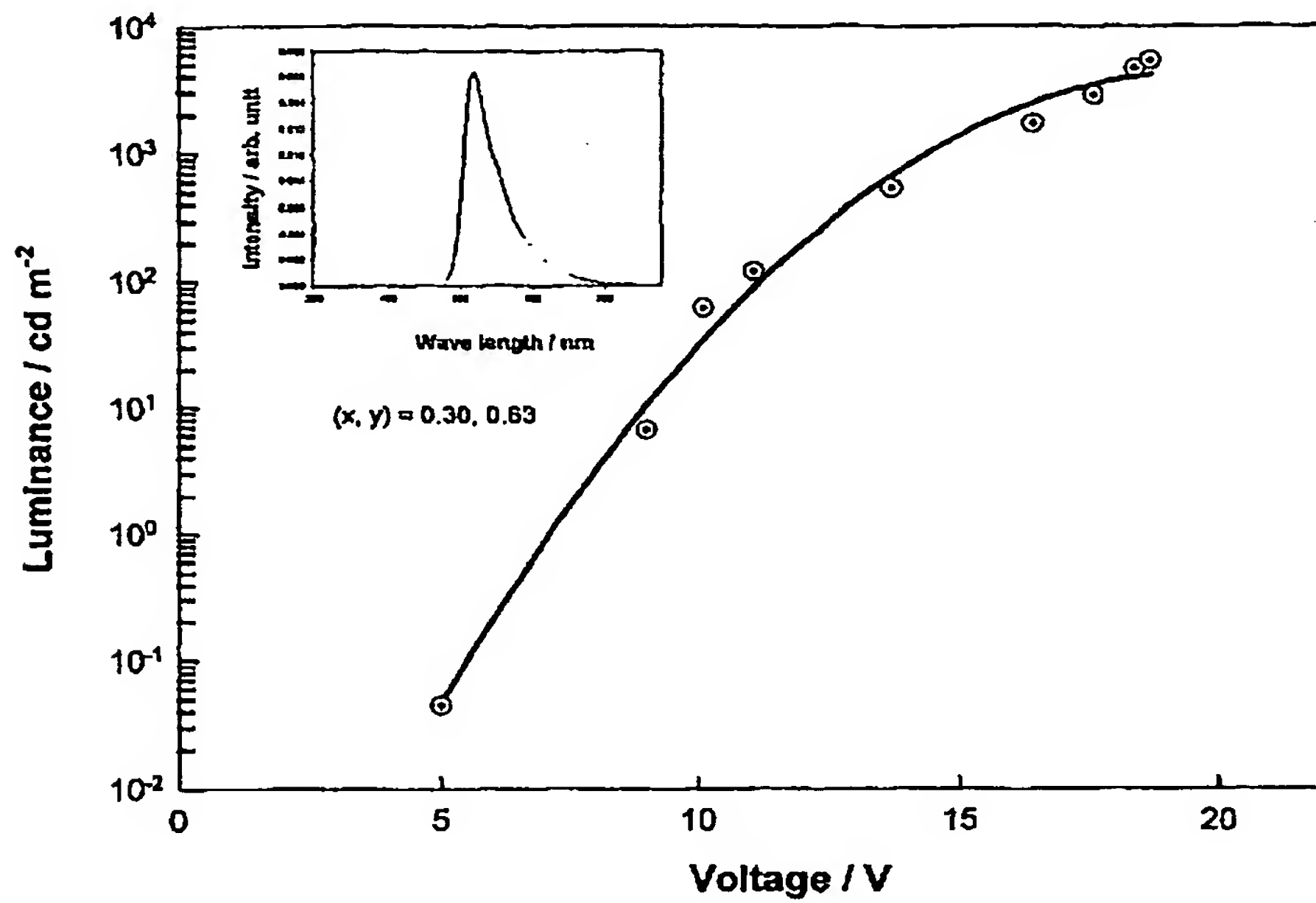


Fig. 17a

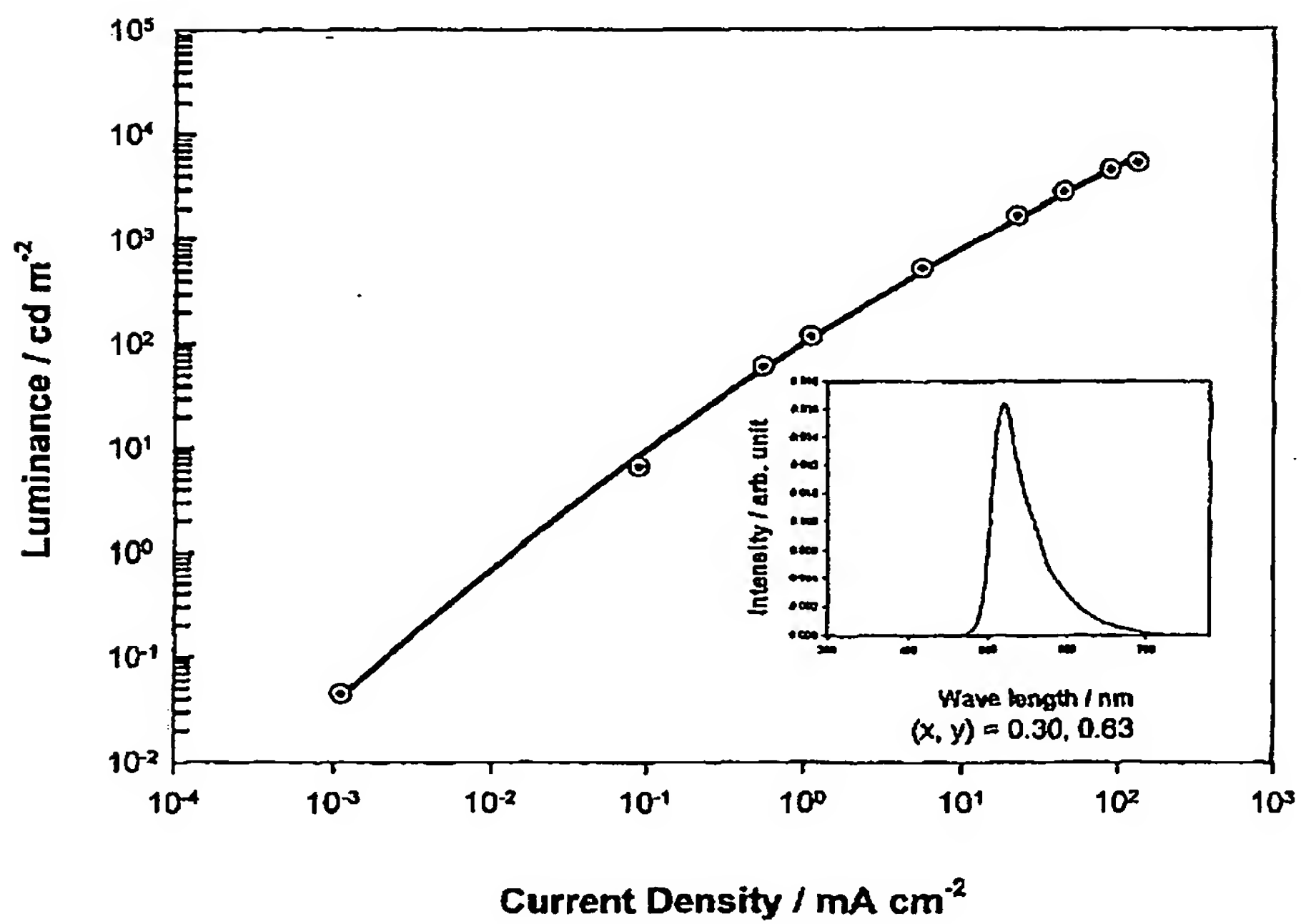


Fig. 17b

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ITO (165 nm)/CuPc (50 nm)/  $\alpha$ -NPB (40 nm)/CBP : Compound D (20 : 6.1 nm)/Compound F (10 nm)/Zr<sub>q</sub>4 (50 nm)/LiF (0.5 nm)/Al

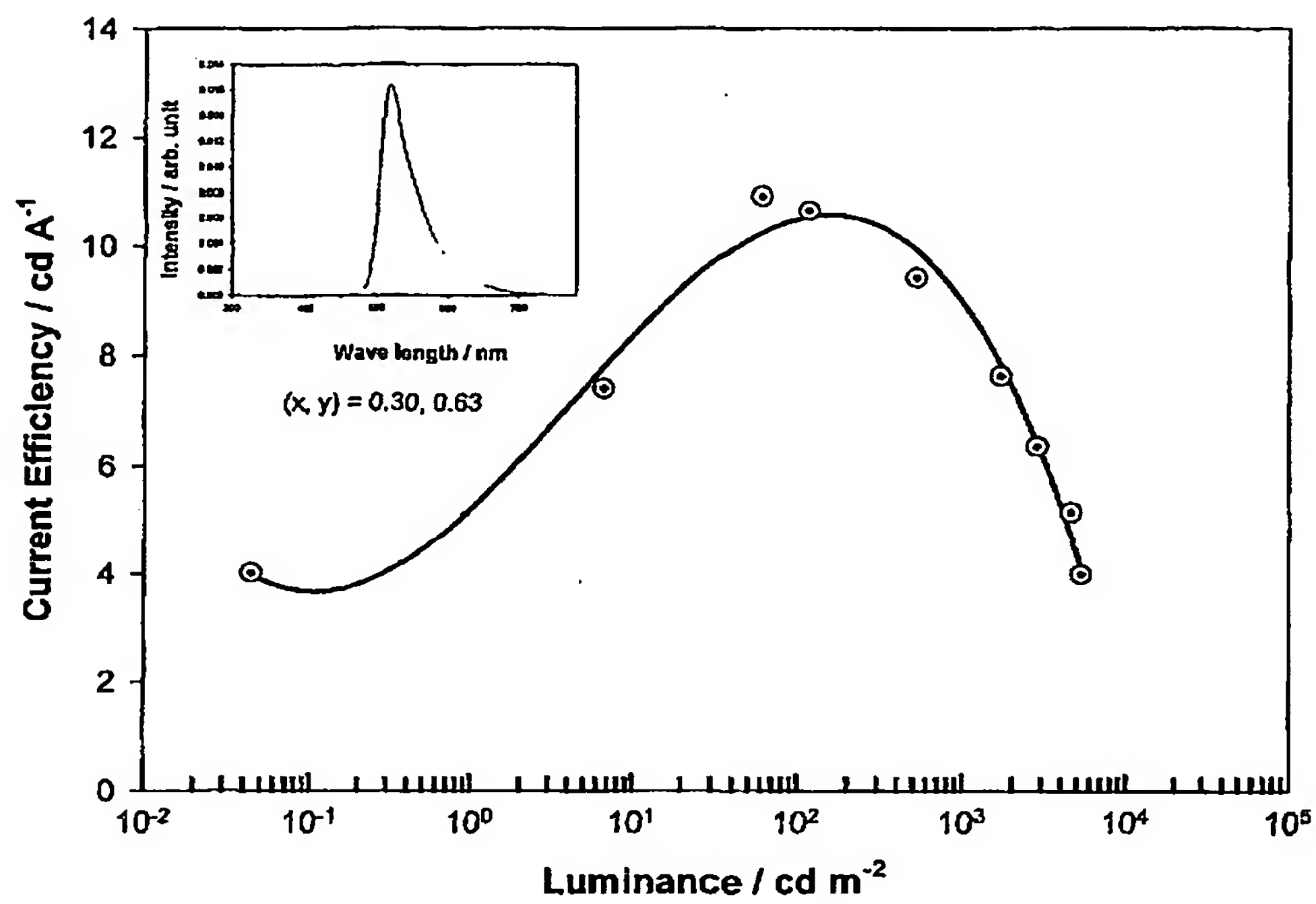


Fig. 17c